

The Europeanization of German Climate Change Policy

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Throughout the series of international negotiations leading to the United Nations Framework Convention on Climate Change (FCCC) and the Kyoto Protocol, Germany, along with the European Union (EU), have been at the forefront of efforts to address the challenges of global warming. In October 1990, for example, the European Community (EC) adopted a target of stabilizing carbon dioxide (CO₂) emissions at 1990 levels by the year 2000 – a position pushed, in part, by the German and like-minded European governments to give them greater influence in those international climate change negotiations. In advance of the third conference of the parties (COP3) to the FCCC, the European Union called for a 15 percent cut in CO₂ emissions by 2010. This EU target was based on a burden-sharing arrangement in which Germany was a major contributor—a 25 percent reduction in domestic CO₂ emissions, which translated into an estimated 80 percent of total EU reductions. In the aftermath of the compromise reached at Kyoto, the burden-sharing arrangements negotiated within the EU called for Germany to undertake a 21 percent domestic cut in emissions of the basket of six greenhouse gases (GHGs) stipulated in the Kyoto Protocol.

Clearly, Germany has been an important player in the global climate change negotiations and is central to the commitments assumed by the EU under the Kyoto Protocol – in the absence of substantial reductions of GHG emissions by Germany, the EU has little chance of meeting its international obligations. The core question to be addressed in this paper is the degree to which the EU has been able to influence the adoption and implementation of global climate change policy at the national level. More specifically, using an analytic framework informed by the literature on “Europeanization,” the paper will first assess the extent to which membership in the EU has shaped German climate change policy. Attention will then turn to the identification of

mechanisms that help explain domestic change, taking care to separate the role of the EU from other potential influences.

Europeanization and the Response to Global Warming

Seeking to disaggregate—and thereby better understand—the various influences on public efforts to address the challenges of global warming is a daunting task. The factors shaping the response to global climate change are complex and rarely uni-directional: multilateral arrangements negotiated at the international level may influence domestic responses; at the same time, national preferences, along with a country's bargaining power, influence the negotiation of those agreements; scientific, business and environmental nongovernmental organizations organized domestically and transnationally seek to shape the preferences and influence the actions of governmental actors. There is an additional factor, however, that may have a significant impact on countries located in Europe—membership in the European Union. In an effort to better understand this particular element of the response to global warming, an analytic lens informed by the literature on “Europeanization” will be used to assess the extent to which the EU has influenced German climate change policy.

For the purposes of this paper, the concept of “Europeanization” is conceived as a process associated with domestic changes due to EU membership. Central to most studies attempting to explain the process of “Europeanization” is the “Goodness of Fit” proposition (Cowles/Caporaso/Risse, 2001; Radaelli, 2003). It hypothesizes that the greater the “misfit” between European policy or processes and their domestic counterparts, the greater the pressures for adaptation or change at the national level. The operative mechanism in this process has been termed “vertical” Europeanization: adaptive pressures are created from the clear demarcation

between the European level, where policy is defined, and the member states, where domestic arrangements must be brought into alignment (Radaelli, 2003:41,42). There are, however, other supplemental or mediating factors that may affect the Europeanization process. Among those most commonly found in the literature are:

- the presence/absence of multiple veto points (multiple veto points can help actors resist pressures for domestic change) (Börzel/Risse, 2003:58);
- a consensual policy style (this may help overcome veto points by making their use inappropriate) (Börzel/Risse, 2003:68);
- institutional arrangements that affect the relative strength of bureaucratic actors; and
- “horizontal” mechanisms such as regulatory competition or markets and EU fora that facilitate the diffusion of ideas and discourses (Radaelli, 2003:41-42).

The starting point for the analysis of German climate change policy is the “Goodness of Fit” proposition. To systematically assess whether pressures emanating from the EU have resulted in changes at the domestic level, the paper will first look at the extent of domestic change along two dimensions (Cowles/Caporaso/Risse, 2001; Wurzel, 2002; Featherstone and Radaelli, 2003):

- “Macro-level” changes—institutional structure and policy style;
- “Policy-level” changes—policy content (e.g., setting of domestic targets/objectives) and policy instrument (e.g., command-and-control regulation, eco-taxes, emissions trading).

That is, we will investigate the extent to which the choice of policy instruments and the setting of domestic targets/timetables, along with the possibility of changes in institutional structure and policy style, are influenced by the EU. Attention will then turn to possible supplemental or

mediating factors that help explain Europeanization—most importantly, the “vertical” or “horizontal” mechanisms discussed earlier.

Policy Style and the Global Warming Debate in Germany

With historical roots in corporatist arrangements typified by close collaboration between the state and functionally organized interest groups (Beyme 1985; Katzenstein 1985), policymaking in Germany is said to be characterized by its emphasis on consensus and consultation (Jänicke and Weidner 1997; Wurzel 2002). This more collaborative approach to policymaking has been reflected in German climate change policy from its inception and continues to this day.

The global warming debate in Germany had its origins in the controversy over nuclear power triggered by the 1986 Chernobyl nuclear accident.¹ With calls for either an immediate shutdown (e.g., the Greens) or phase-out (e.g., Social Democratic Party or SPD) of all nuclear plants, the construction of additional coal-fueled power plants was proposed to compensate for the lost capacity of nuclear facilities. The parties supporting nuclear power—most importantly, the governing Christian Democratic Union (CDU) and its Bavarian sister party (Christian Socialist Union or CSU)—found in the issue of climate change what they hoped would be an effective counterbalance, arguing that nuclear power made good environmental sense when confronted with the ominous threats posed by global warming. Within the context of conflicting scientific claims and political polarization, it was decided to establish an *Enquete* (Inquiry) Commission—a parliamentary body occasionally created "to deal with complex and often politically sensitive issues" (von Moltke, 1991:26).

The Enquete Commission on Preventive Measures to Protect the Atmosphere was created

in December 1987. The first interim report, Protecting the Earth's Atmosphere: An International Challenge (Enquete Commission,1989), was based on hearings with scientists, politicians, representatives from industry, and federal ministries as well as discussions with environmental and consumer groups. It concluded that there was "an extraordinary need for action." ((Enquete Commission,1989:43). A subsequent report followed in October 1990. It found that

There is such massive and unequivocal scientific evidence on...the man-made greenhouse effect, the resulting climatic change and its repercussions...that there can be no doubt that preventive action must be taken immediately, irrespective of any need for further research. (Enquete Commission,1990:24)

The Enquete Commission continued to hold hearings and produce reports; however, its work was most crucial in the formative years of German climate change policy. The Enquete Commission, in essence, stepped in to fill a political vacuum left by the political parties, interests groups and government agencies, none of which were prepared to deal with the global warming question, let alone provide leadership:

- During the early 1980s, the SPD was not receptive to a message about the possible dangers associated with CO2 emissions. In a party deeply divided over nuclear power, giving credence to the concerns about climate change threatened further division. Perhaps more importantly, strong ties to the powerful coal interests in Germany made for ready global warming skeptics. With Chernobyl, the party—out of federal office by this time—became more united in its rejection of nuclear power, but the global warming issue raised questions about the feasibility as well as desirability of a nuclear phase-out. It was to take several years of internal debate to work out a position on global warming that to some degree reconciled the various environmental/anti-nuclear/pro-coal factions present in the party.

- The CDU hesitated to take up the issue in the early 1980s—despite its strong support for nuclear power—because of its close links to industry and the implications of global warming for fossil fuel use. After Chernobyl, the CDU—along with the nuclear lobby—touted nuclear power as a solution to the problem, precisely because it did not emit CO₂. If the real problem were CO₂ being emitted into the atmosphere, however, regulatory measures resulting in lower CO₂ emissions and/or higher prices for fossil fuels would seem to be the logical next step. The prospect of such actions initially found little support within important elements of the CDU/CSU, its FDP (Free Democratic Party) coalition partner, and industry.
- The Greens and major environmental groups came relatively late to the global warming problem, in large part because of the nuclear power issue. They had their formative roots in the anti-nuclear movement of the 1970s and owed much of their strength to an uncompromising rejection of nuclear power. They were less inclined to give much credence to the claims about global warming, especially since those claims were often associated with justifications for nuclear power.

The government, too, was ill-prepared to address the global warming issue. In 1981, a study by the German Council of Experts on the Environment—an independent body created to provide the government with scientific assessments of environmental questions—gave practically no credence to anthropogenic influences on world climate. It was not until late 1987 that the Council finally acknowledged the possibility of climate change due to CO₂ emissions and other greenhouse gases (Hatch, 1995:426). In other words, government officials did not receive much early warning on the development of this issue through channels established for this purpose. Perhaps more critically, however, the global warming question seemed to have

fallen between the institutional cracks of government during much of the 1980s.

The Federal Ministry for the Environment (BMU) had only come into existence in 1986 following Chernobyl and its (mis)handling by the Interior Ministry, where responsibility for most environmental issues had resided. Climate change, however, was one of the areas outside the competence of the Interior Ministry. Through its control of meteorological questions, the Transport Ministry had been given responsibility for the climate issue, where it was defined largely as a scientific question devoid of much political content. It was only after the ministry failed to provide for the effective participation of Germany in the initial deliberations of the Intergovernmental Panel on Climate Change—and the criticism that followed from the Enquete Commission—that the Chancellor's office transferred the climate issue to the BMU in late 1988.

In sum, it was within the framework of the Enquete Commission that the initial responses to climate change questions were formulated. Prominent figures from the scientific community and leading parliamentarians—chosen not just for their expertise but also for their ties to important social groups (von Moltke, 1991:27)—were brought together to deliberate. They were not simply agents of their political parties, interest groups or scientific bodies, however. Representatives from major industrial associations were consulted, studies were commissioned, politicians and ministry officials were heard, but Commission members set the tone and direction of deliberations. Out of this consultative process emerged a broad consensus for political action.

Following the release of the Enquete Commission's first report, the locus of activity gradually shifted towards government as attention began to focus on appropriate policy responses, but the consensual policy style has continued: an interministerial working group was

created in June 1990 to formulate the first national program to reduce German GHG emissions; the German Emissions Trading Group—composed of a representatives from federal and state governments, parliament, industry, and environmental groups—was established in October 2000 the face of a controversial European Commission proposal for an emissions trading system; in 2006 and 2007, a series of “Energy Summits” to bring together important stakeholders in the debate surrounding the intersection of energy policy and climate change. In sum, there has been little change in the consensual nature of German policy style.

Institutional Structure and Climate Change Policy

As attention shifted to the appropriate government response to climate change, the substance of the debate centered on two questions: by what amount should Germany reduce its CO₂ emissions and what methods should be used to achieve the agreed target? In addressing these questions, however, fundamental issues related to institutional structure arose, due in large part to the nature of the climate change issue itself: no single government ministry could control climate change policy, each ministry had different organizational responsibilities and constituencies, and—with coalition governments the norm in Germany—ministers frequently had different party affiliations.

The two major protagonists in governmental efforts to formulate a policy toward global warming were the BMU, which was the lead ministry in the climate change issue, and the Ministry for Economics (BMWi), where the responsibility for energy policy resided. As will be illustrated the in the following sections on policy content and instruments, little has changed in the institutional structure shaping climate change policy; these two ministries have remained at the center of the policy process from the late 1980s to the present.

Policy Content: Targets and Timetables for GHG Reductions

International negotiations on a climate change agreement began in the early 1990s. A central issue in those negotiations was whether a binding target and timetable (stabilization of GHG emissions at 1990 levels by the year 2000) should be included in the treaty. As part of an effort to hammer out a national position on the question of CO₂ emissions reductions and the timeframe within which the agreed target should be achieved, the BMU called for a 25 percent reduction in CO₂ emissions by the year 2005. This was much higher than what energy experts in the BMWi believed possible or desirable given their constituents in the energy sector and industry. The Economics Minister opposed binding targets because of concerns about the loss of economic flexibility and dynamism in energy security and competitiveness. In June 1990, the federal cabinet adopted the goal favored by the BMU: a 25 percent reduction in CO₂ emissions by the year 2005 compared to 1987 levels. At the same time, the BMWi called for the early inclusion of eastern Germany in the calculations, since the former German Democratic Republic had been so inefficient in its energy use—a position opposed by the BMU because it would weaken the 25 percent target. A subsequent cabinet decision designed to accommodate BMWi's views extended the reduction target to 25-30 percent by the year 2005 in light of German unification.²

In October 1990, the European Community adopted a target of stabilizing CO₂ emissions at 1990 levels by the year 2000. Though considerably weaker than the German target, it was hoped that this unified position would provide European governments greater leverage in the international negotiations. Ultimately, non-binding language on targets and timetables was included in the Framework Convention on Climate Change signed at the Rio Summit in 1992.

The first session of the conference of the parties (COP1) to the FCCC was held in Berlin 1995. At the top of the agenda for COP1 was a review of the adequacy of the commitments contained in the climate change convention. Out of this review came the so-called Berlin Mandate which, in acknowledging that current commitments were inadequate, called for the negotiation of more ambitious commitments, hopefully by COP3 in 1997.

Among the issues to be resolved in the negotiations leading up to COP3 were the reduction targets and the timeframe for achieving them. In March 1996, Germany proposed a reduction target of 10 percent by 2005 and 15–20 percent by 2010 (Oberthür and Ott 1999: 116). At the same time, efforts were made within the EU to formulate a common position. Initial discussions focused on an Irish proposal for a 5–10 percent reduction in CO₂ emissions by 2005. Given the role of nuclear power in its energy mix, France argued for reductions based on per capita emissions. Germany, for its part, pushed for a 20 percent reduction in CO₂ emissions, fearing that a low common target would weaken the EU's position in the international negotiations. Most other member states supported a less ambitious target for the EU. Greece, Ireland, Portugal, Spain and Sweden (because of a planned phase-out of nuclear power) asserted their right to increase domestic CO₂ emissions.

In the March 1997 meeting of the EU's Environmental Council, a common negotiating position was hammered out. It called for a 15 percent reduction in emissions by 2010, though a precise burden-sharing arrangement was not agreed to at the time. Germany, however, committed to reductions that would cover approximately 80 percent of the EU's overall target. Following the adoption at Kyoto of an 8 percent reduction target for a basket of six GHGs by 2008–12, a modified burden-sharing agreement was accepted by EU environmental ministers in

June 1998. Germany's share translated into a 21 percent reduction in the Kyoto Protocol's basket of GHGs. (see Hatch, 2007:49-50).

All told, the initial effects of Europeanization on Germany's approach to targets and timetables were limited. Reduction targets for CO₂ were domestically generated, though the ambition of those targets did lead Germany to push for an assertive EU position on targets and timetables in the international negotiations. In addition, once the Kyoto Protocol was ratified, Germany's emissions reductions would no longer simply be a national statement of intent, but part of the EU's legally binding commitment to reduce GHG emissions.

The Choice of Policy Instruments

Among the initial measures adopted by the German government to help meet its national emissions reduction target were the 1991 Electricity Feed Act compelling utilities to purchase electricity generated from renewables at a subsidized rate, the Waste Avoidance and Waste Management Act, and the Ordinance on Heat Insulation, which mandated insulation standards for new buildings (see Hatch, 1995:431-32). All represented the type of approach that typically characterized German environmental regulation: a so-called "command-and-control" regulatory approach. These instruments also represented the type of regulation increasingly criticized by industry for its inefficiency, high cost and adverse impact on competitiveness (Hatch, 2005:2-3).

In 1994, the BMU published a report which found that CO₂ emissions had declined by 14.7 percent between 1987 and 1993 (BMU, 1994:10). At the same time, however, it concluded that these reductions were due largely to the effects of unification: inefficient energy use in the former East Germany—combined with its reliance on lignite (70-80 percent of primary energy)—meant that the shift to other fuels and their more efficient use reduced CO₂ emissions

substantially; the collapse of the economy in the East led to lower CO₂ emissions as well. The inference drawn from these developments was that the measures approved up to that point would fall well short of the government's reduction goal of 25-30 percent by 2005 unless additional actions were undertaken (BMU,1994a:87).

In the months leading up to COP1 in Berlin, efforts to put in place the set of measures felt necessary to achieve the Germany's target encountered several hurdles, not the least of which was industry's resistance to additional regulatory measures. In an attempt to overcome a political impasse, an additional instrument was proposed—one that also came from Germany's traditional policy toolbox and drew upon the consensual nature of German policymaking: voluntary agreements between the federal government and industry to limit CO₂ emissions.

Voluntary Agreements

Negotiations between industry and representatives from the BMU and BMWi began in January 1995. Among the major points of contention were the explicitness of the commitments, how demanding they should be, and what concessions government would provide in return.

German industry was most concerned about a proposed Heat Utilization Ordinance for industrial companies (as well as a possible CO₂/energy tax, to be discussed shortly). If adopted, the ordinance would have required companies to recover and utilize heat generated in their plants and make surplus heat available to others, an expensive process that—in the eyes of industry—would severely compromise its competitiveness. It wanted these measures off the table. The government, for its part, wanted high absolute targets representing reductions that moved well beyond business as usual. Industry favored "specific" rather than "absolute" targets—reductions calculated on a per unit of output basis ("specific") rather than in lower overall emissions

("absolute").

In March 1995, the "Declaration by German Industry and Trade on Global Warming Prevention" was issued. In this declaration, 15 industry associations agreed to use "special efforts" to reduce their specific CO₂ emissions or specific energy consumption up to 20 percent by the year 2005 (base year of 1987). The government agreed to hold in abeyance additional regulatory measures (such as the Heat Utilization Ordinance) and CO₂/energy tax. While welcomed by many concerned about the absence of action on global warming, the agreement was not without its critics (e.g., Fishedick, et al., 1995; Kohlhaas, et al., 1995).

In response to such criticism, further negotiations between government and industry resulted one year later in a revised agreement that pledged to reduce specific CO₂ emissions by 20 percent, with a change in the base year from 1987 to 1990, which brought it into conformity with the base year employed in the FCCC negotiations while, at the same time, making it more ambitious, since many of the "wall fall" benefits from unification would be lost. Moreover, some of the associations switched their commitments from specific to absolute emissions reductions. Also, additional industrial associations joined, meaning that approximately 80 percent of German industry's total energy consumption was now covered by the agreement. Finally, a monitoring system—to be administered by an independent third party (the Rhine-Westphalia Institute for Economic Research)—was established to provide greater transparency in evaluating compliance with the agreement.

While in opposition, the SPD and Green party had been critical of the CDU/FDP government's over-reliance on voluntary measures. Following elections in 1998 that brought a center-left coalition into power, there were questions about the commitment of this new

SPD/Green government to the voluntary agreements. As it turned out, the coalition agreement negotiated between the SPD and Greens following the elections included a statement supporting their use.

Discussions on revisions to the voluntary agreements began in earnest during the first months of 2000. Around the same time (March 2000), the Council of Environmental Advisors announced that the government would not be able to achieve its emission reduction goals unless additional efforts were undertaken, a fact subsequently acknowledged in statements by both the Ministers of Economics and the Environment. In October 2000, one month before negotiations on the Kyoto Protocol were to resume at COP-6 in the Hague, the government announced a further iteration in Germany's Climate Protection Program (BMU,2000).

Within the context of the new national Climate Protection Program, a general agreement on further voluntary actions was signed between the government, the Federation of German Industry, and individual industrial associations in November. It committed industry to specific CO₂ reductions of 28 percent by 2005 (the earlier agreement had set the target at 20 percent) and a 35 percent reduction in emissions of Kyoto gases (expressed in CO₂ equivalents) by 2012 compared to what they were in 1990. It was estimated that this would result in an additional 10 million ton reduction in CO₂ emissions by 2005 and a further 10 million tons CO₂ equivalent by 2012 (BMU,2000). Negotiations with individual industrial associations were to follow. The most significant agreement was between the power sector and federal government: in accordance with the target established for the energy sector in the Climate Protection Program, the utilities committed to a 45 million ton reduction in CO₂ emissions by 2010, 20 million tons of which were to come from cogeneration (Hatch, 2005:114-17).

In sum, resort to voluntary agreements was rooted largely in domestic conditions and didn't move beyond the tradition repertoire of policy instruments.

Renewable Energy

As indicated earlier, one of the first measures adopted by the German government to reduce GHG emissions was the 1991 Electricity Feed Act, which required utilities to purchase electricity generated from renewables at a subsidized rate. As part of an effort to place its own stamp on German climate change policy and to encourage the expansion of renewable energy, Red-Green coalition introduced the Renewable Energy Sources Act (EEG) in April 2000. In the wake of this legislation, Germany experienced an accelerated growth in the generation of power from renewables. The most impressive area of growth has been in wind power. Between 1991 and the implementation of the EEG in 2000, Germany had achieved an installed capacity of 4,500 MW. By the end of 2001, capacity had almost doubled to approximately 8,750 MW (BMU 2002: 14). At the beginning of 2003, over 12,000 MW of electricity were being generated by wind power, representing 3.5 percent of all electricity consumption in Germany. In relation to other countries, this level of production translated into one-third of the world's wind power, making Germany the single largest producer, with the US and Spain following at 25 and 15 percent respectively.

All told, the proportion of electricity from renewables increased from 5.2 percent in 1998 to over 10 percent in 2004. The announced goal of the government was to have this share rise to 12.5 percent by 2010. Over the longer term, the government set targets of 20 percent of electricity from renewables by 2020 and one-half of all energy by 2050. Though significant in terms of efforts to address climate change, these developments had little to do with the

Europeanization process.

CO2/Energy Tax and Ecological Tax Reform

In the months following the adoption of national reduction targets in 1990, debate over the means to achieve this target focused, for the most part, on the application of a CO₂ /energy tax and its linkage to a proposed EC-wide climate protection tax. The BMU favored the adoption of a tax or levy, even in the absence of agreement at the EC level. The BMWi opposed a CO₂ levy, especially if it were undertaken unilaterally.

In September 1991, the EC Commission released a draft paper containing a set of proposals designed to achieve the stabilization target adopted the previous year. As part of this package, the Commission proposed a combined CO₂/energy tax that would be linked to 50 percent energy content and 50 percent carbon content. In response, European industrialists unleashed an intense lobbying effort in opposition (The Economist, 9 May 1992:19,85). It had an impact. The revised proposal of the Commission made any EC energy tax conditional on other OECD countries adopting similar measures.

Within the internal debate over global warming policy, the BMU had become the major proponent of Germany playing a leadership role in the international fight against global climate change. In the case of a CO₂ tax/levy, this meant Germany going it alone if necessary. For the BMWi, there should be no such role. If the German economy were to retain its economic competitiveness, there was no alternative to an EC-wide agreement. Up to mid-1991, the BMU had enjoyed the support of the Chancellor in the various interministerial struggles surrounding the global warming question. With economic growth slowing and the costs of German unity mounting, however, the BMU began to receive less backing from Chancellor Kohl and others in

the CDU. In December 1991, it was decided that the government would adopt a CO₂ tax only in combination with an EC-wide CO₂/energy tax.

In sum, proposals within Germany and the EC to adopt a CO₂/energy tax met with little success. In the absence of consensus on the efficacy of this policy instrument among the major protagonists in this policy debate domestically, the decision by the Commission to link an EC energy tax to a broader adoption within the OECD provided the pretext for abandoning a CO₂/energy tax at that time. By the mid-1990s, however, some type of tax designed to address the climate change problem had made its way back onto the domestic agenda.

Support for an “ecological” tax reform had been building in Germany as economic growth stagnated and unemployment rose during the 1990s. Proponents argued that an ecological reform of the tax system could provide a “double dividend”: environmental objectives could be achieved more efficiently through this market-based instrument while at the same time reducing the high cost of labor for companies, thereby encouraging economic expansion and job growth. The eco-tax reform was to be revenue-neutral in that increased taxes on energy would compensate for reductions in company social security contributions. Following the election of the red-green coalition in 1998—and several months of negotiations among coalition partners and various stakeholders—an eco-tax came into effect on 1 April 1999, gradually raising the price on gasoline, heating oil, natural gas and electricity in a series of steps.

Reflecting the influence of various interest groups and the need to get sufficiently broad support for this unilateral action, the government had to make several concessions: the consumption of coal was exempted and certain energy-intensive sectors were made eligible for reduced tax rates. In addition, electricity from renewables received only limited exemptions

despite the desire to encourage the development of this type of energy source. These limitations on renewables, however, had more to do with EU requirements governing competition in a liberalizing European electricity market (to be discussed later). The final increment in the eco-tax was introduced in early 2003 (see Kohlhaas and Meyer 2005).

Emissions Trading

The protocol signed at Kyoto in December 1997 was a far-from-complete document. Left for later negotiations was the task of fleshing out the practical details required for its effective functioning. The magnitude of that task soon became apparent, as talks dragged on for another four years. Among the most contentious issues was the extent to which the “flexible mechanisms” accepted at Kyoto (i.e. emissions trading, along with joint implementation/JI and the Clean Development Mechanism/CDM) could be used to meet the reduction targets adopted in the protocol.

Going into the negotiations, Germany and the EU had emphasized the importance of industrialized countries taking the lead in emissions reductions, meaning that those reductions should come primarily from domestic measures. The US, along with such countries as Australia, Canada and Japan argued for maximum flexibility in the use of instruments, thereby lowering the costs of meeting reduction targets. The compromise at Kyoto resulted in acceptance of the flexible mechanisms, but their use was supposed to be ‘supplemental’ to domestic action. In subsequent negotiations, Germany sought to ensure that the flexible mechanisms were, in fact, supplemental to domestic reduction measures. Domestic factors played a central role in shaping this priority.

The position—that Germany and other industrial countries must take the lead in

combating climate change, and that this requires first and foremost domestic action—was based largely on concerns about economic competitiveness. Though a significant share of Germany’s ambitious reduction targets had come from ‘wall fall’ effects, the mix of policy instruments applied to the mitigation of climate change has imposed substantial financial burdens on the domestic economy—reductions in GHG emissions from renewable sources, for example, are relatively expensive (Michaelowa 2003: 41). That the Kyoto Protocol might allow other industrialized countries to avoid domestic actions, thereby gaining competitive advantages in globalizing markets, has been central to the calculations of the German government in the negotiations.

In preparation for the negotiating session at COP6 in November 2000, Germany, in conjunction with several other EU member states and the European Commission, were successful in having the EU adopt a position calling for a 50 per cent ceiling on the use of flexible mechanisms.

As it turned out, the differences over limits on the use of flexible mechanisms proved unbridgeable. Following the withdrawal of the United States from the Kyoto Protocol in March 2001, the talks assumed a new dynamic. Negotiations resumed in July 2001 and a text was finalized at COP7 the following November. Since the conditions of ratification gave the countries previously aligned with the U.S. considerable leverage, the EU made the major concessions required to get an agreement: no concrete ceilings were imposed on the use of flexible mechanisms.

During negotiations on the Kyoto Protocol in 2001, debate at the European level began to intensify over a directive being drafted by the European Commission for an emissions trading

scheme in the EU. In general terms, German concerns about emissions trading in Europe mirrored to some degree those surrounding the Kyoto instruments. In a number of member states (e.g. Austria, Belgium, Denmark, Ireland, Italy, the Netherlands, Spain), emissions trends in recent years had raised serious questions about those countries' ability to meet their announced targets. From Germany's perspective, additional domestic action was required if questions of competitiveness were to be avoided (BMU 2000: 152). The concerns became more specific with the publication of a draft directive in October 2001.

Among the most contentious issues for Germany were the imposition of mandatory quotas on CO₂ emissions in selected industrial sectors and the level of permitted cuts. German industry was especially opposed to the draft, arguing that it imposed additional burdens that would further threaten its competitiveness. The BMWi, in turn, became the major advocate for industry's position within the government. While earlier expressing reservations about emissions trading, the Green Party and environmental nongovernmental organizations now supported the proposal (Michaelowa 2003: 37). Among the specific changes sought by the government were recognition of actions undertaken by Germany since 1990 in the allocation of emissions permits; the free distribution of emissions permits on a permanent basis; compatibility with the flexible mechanisms of the Kyoto Protocol, and a 'pooling' arrangement that would require sector-wide emissions quotas rather than the allocation of permits at the plant level (i.e. acceptance of a format compatible with the existing voluntary agreements).

The compromise agreed to at a meeting of the Environmental Council in December 2002 reflected the influence of Germany in the deliberations: acknowledging early efforts, 1990 could be used as the base year for the allocation of emissions permits; member states would be able to

distribute those permits free of charge through 2012; emissions credits from JI and CDM projects could be sold on the European emissions market; permits could be allocated on the basis of earlier voluntary agreements between government and industry; certain sectors and companies could apply to opt out of emissions trading until 2008; and, in a modest concession made by the German government, companies would be permitted (rather than required) to pool their emissions rights (Press Statement 2002; Süddeutsche Zeitung, 10 December 2002). In sum, though the German government played a central role in shaping the final version of the Emissions Trading Scheme (ETS), the EU was clearly the driving force behind its adoption (for more detail, see Bang/Vevatne/Twena, 2007).

Factors Shaping the Europeanization of German Climate Change Policy

As many of the policy studies in the Europeanization literature suggest (Radaelli, 2003:36), there is little indication that Europeanization has occurred in terms of policy style and institutional structure. That is, the Europeanization process appears to have had little impact on the central elements of Germany's political structure or policy style. This is perhaps best explained through the "goodness of fit" argument. That is, there have been few pressures on institutions or policy style to adapt due to the absence of a "misfit" between European-level processes and institutions and those found at the domestic level. The European approach to climate change more-or-less reflects the influence of Germany (and like-minded member states) who had pushed for progressive positions on climate change within the EU. The policy style and institutional arrangements that contributed to the adoption of ambitious targets and measures domestically, at the same time, meant that little structural adaptation was necessary. At the policy level, however, considerable Europeanization appears to have occurred in Germany.

From an initial emphasis on regulatory measures that encountered strong resistance from industry and adamant opposition to market instruments, we have seen a grudging acceptance of such instruments due, at least in part, to the EU. The most significant example in this regard is the “vertical” Europeanization that occurred through the EU directive on emissions trading. This directive compelled German stakeholders to reorient their approach to climate protection policy. As a consequence of the ETS, the German government was now required to submit a national allocation plan to the EU which, for the first time, established emissions quotas for 2600 industrial firms and utilities in Germany. In the initial allocation period (2005-2007), there was an overly generous allocation of permits for German industry. For the second period (2008-2012), the initial draft plan submitted by the German government to the European Commission in June 2006 called for annual allowances totaling 482 million tons (mt). The Commission was highly critical of that goal. When emissions totals for 2005 (474 mt) were released later in 2006, the position of the German government became untenable. It announced a revised figure of 465 mt in November 2006, but the Commission said this goal was too weak as well. The Commission subsequently approved an annual allocation of permits for Germany that may not exceed 453.1 mt. Despite strong objections from German industry as well as the government, the competence of the European Commission in setting this binding cap on CO₂ emissions in Germany was reaffirmed by the eventual (sullen) acceptance of the German government.

Domestic factors—most importantly, the 1998 change in government—best explain the introduction of the ecological tax reform in Germany. Other factors associated with the “horizontal” form of Europeanization, however, played a role as well. The possibility of CO₂/energy tax had been discussed at the EU level for at least a decade. Moreover, most

European countries have used, or plan to use some form of taxes in their environmental policy (Kohlhaas and Meyer, 2005). The EU, in other words, has provided a forum where information and experience have been exchanged. In terms of the design of the tax reform, other mechanisms associated with the EU have played a role as well. Concerns about maintaining competitiveness in open markets account for the concessions made to the energy-intensive sectors. Electricity from renewable sources received only limited exemptions from the eco-tax because of the EU-principle of nondiscrimination—a principle upheld by the European Court of Justice in a case where Finland had attempted to tax imports of electricity (Kohlhaas and Meyer, 2005:132-33).

Finally, though the ambition of the targets and timetables adopted by Germany was due largely to domestic factors, EU membership has made its reduction target under the Kyoto Protocol legally binding. With the Protocol coming into force in 2005, Germany is now legally obligated to reduce its GHG emissions by 21 percent, the amount established in the burden-sharing agreement of the EU.

Conclusion

Germany has been at the forefront of efforts to meet the challenges of climate change. Domestically, its program to reduce GHG emissions has been among the most ambitious in the world. It also has been a central actor in shaping Europe's approach to climate change and a key to the successful implementation of the EU's international commitments. At the same time, Germany's approach to climate change has been influenced by the EU. The process of Europeanization, most importantly in the areas of policy instrument and content, appears to have become increasingly salient. This is reflected most graphically in the EU's emission trading system, which has assumed a central role in Germany's efforts to combat the threat of global

climate change.

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Notes

¹ For a discussion of early developments in the climate change issue, see Hatch (1995:420-21) and Cavander and Jäger (1993). For detailed accounts of the controversy surrounding nuclear power in Germany, see Hatch (1986,1991,1996).

² One further modification was adopted just prior to the first meeting of the parties to the FCCC in 1995: the base year was changed from 1987 to 1990, thus bringing it into conformity with that employed in the international negotiations; the target was again set at 25 percent (rather than 25-30 percent).