

Weidner, Helmut

Working Paper

Global equity versus public interest? The case of climate change policy in Germany

WZB Discussion Paper, No. SP IV 2005-102

Provided in Cooperation with:

WZB Berlin Social Science Center

Suggested Citation: Weidner, Helmut (2005) : Global equity versus public interest? The case of climate change policy in Germany, WZB Discussion Paper, No. SP IV 2005-102, Wissenschaftszentrum Berlin für Sozialforschung (WZB), Berlin

This Version is available at:

<https://hdl.handle.net/10419/49603>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

DISCUSSION PAPER

WZB

WISSENSCHAFTSZENTRUM BERLIN
FÜR SOZIALFORSCHUNG

SOCIAL SCIENCE RESEARCH
CENTER BERLIN

SP IV 2005-102

Global Equity versus Public Interest? The Case of
Climate Change Policy in Germany

Helmut Weidner*

*Kontakt/E-mail: [<weidner@wz-berlin.de>](mailto:weidner@wz-berlin.de)

ZITIERWEISE ● CITATION

Helmut Weidner

Global Equity versus Public Interest? The Case of Climate Change Policy in Germany

Discussion Paper SP IV 2005-102, Wissenschaftszentrum Berlin für Sozialforschung 2005

Wissenschaftszentrum Berlin für Sozialforschung
Reichpietschufer 50, 10785 Berlin, Federal Republic of Germany

Tel.: +49/30/25491-0 ● Fax: +49/30/25491-684

E-mail: <wzb@wz-berlin.de> ● Internet: <<http://www.wz-berlin.de>>

SUMMARY

Global Equity versus Public Interest? The Case of Climate Change Policy in Germany

The paper attempts to shed some light on the kind of role equity norms play in German sustainable development policy and the related discourse, focusing on the issue of global climate change. Especially the tensions between the public discussion of equity *among* and *within* nations are investigated. Attitudes and commitments of the general public and the main actor groups towards global climate change policies and related equity issues are analyzed. One of the central findings of the analysis is that the norm of global fairness enjoys broad (rhetorical) support by all actor groups and the public. However, the support by the public must be characterized as uninformed consent because the effects of the various global climate policies *within* Germany are either not discussed or played down by the proponents of a progressive climate change policy. The debates are framed by two different but overlapping discourses informed by the concepts of sustainable development or ecological modernization. While with respect to global climate change policy the sustainable development discourse dominates at the programmatic level (concerned with norms, values and fairness principles), it is clearly the concept of ecological modernization that underlies the concrete policies.

ZUSAMMENFASSUNG

Globale Gerechtigkeit und Gemeinwohl am Beispiel der Klimapolitik in Deutschland

In dieser Studie geht es um die Frage, welche Rolle globale Fairness-Normen in der deutschen Nachhaltigkeitspolitik spielen. Sie wird am Beispiel der Klimapolitik Deutschlands, und zwar auf der nationalen und der lokalen (Lokale-Agenda-21-Prozesse) Ebene untersucht. Fokussiert werden insbesondere die Spannungen, die zwischen Fairness-Konzepten auftreten, die einerseits auf den globalen Raum und andererseits den Nationalstaatsraum bezogen sind. Das betrifft insbesondere Spannungen zwischen konsensbasierten Normen globaler Gerechtigkeit und nationalen Gemeinwohlerfordernissen. In der realen Klimapolitik erweist sich, dass diese Bezüge selten systematisch analysiert und diskutiert werden. Das gilt für die öffentliche Diskussion ebenso wie für den Wissenschaftsbereich. Hieraus folgt unter anderem, dass es zwar eine breite öffentliche Unterstützung für eine progressive Klimapolitik auf der Basis globaler Gerechtigkeitsnormen gibt, diese Unterstützung aber in weitgehender Unkenntnis über die sozio-ökonomischen Verteilungsfolgen einer solchen Politik für die Bevölkerung innerhalb Deutschlands erfolgt. Die negativen Equity-Konsequenzen der Klimapolitik innerhalb Deutschlands stehen völlig im Schatten der dominierenden globalen Fairness-Debatte. Gleichwohl sind die konkreten Politiken vom (pragmatischen) Konzept der „ökologischen Modernisierung“ bestimmt, das weitgehend mit konventionellen Gemeinwohlvorstellungen übereinstimmt. Das „Nachhaltigkeitskonzept“, dem das Ziel globaler Gerechtigkeit zugrunde liegt, beherrscht hingegen die programmatisch-rhetorische Ebene der globalen Klimapolitik beherrscht.

TABLE OF CONTENTS

Summary	iii
Zusammenfassung	iv
0. Introduction	1
1. Climate Change Policy and the Concept of Equity	4
2. The Concepts of Ecological Modernization (EM), Sustainable Development (SD), and Public Interest: Basic Differences and Similarities	10
2.1 Ecological Modernization (EM)	11
2.2 Sustainable Development (SD) and Public Interest: Differences and Similarities	14
2.2.1 Sustainable Development	15
2.2.2 Environmental Interest, Public Interest, and Sustainability: Tensions and Interaction	19
2.3 The Relationship with Equity	28
3. Environmental Policy and Sustainable Development Policy in Germany	30
3.1 Environmental Policy	30
3.1.1 General Overview	30
3.1.2 Climate Change and Energy Policy	36
3.2 Ecological Modernization (EM) as Conceived by the Government	40
3.3 Sustainable Development Policy	44
3.3.1 The Federal Government's Sustainable Development Policy	44
3.3.2 Local Agenda 21 Activities	49
3.3.3 Summary: Main Characteristics of Governmental SD Policy	51
4. Attitudes Towards Climate Change Policy and Equity Concerns	55
4.1 Public Attitudes	55
4.1.1 The Surveys 'Environmental Consciousness in Germany'	55
4.1.2 Various Surveys on Environmental Consciousness	58
4.2 The Equity Issue in Local Agenda 21 Activities	68
5. Discussion	72
References	83

0. Introduction

This paper attempts to shed some light on the kind of role equity norms play in German Sustainable Development (SD) policy and the related discourse on global climate change and in particular, carbon dioxide (CO₂) emissions.

The scientific and political discussion on climate change is still characterized by major uncertainties concerning the causes and impacts of climate change as well as the most effective mitigation strategies. With respect to the (natural) scientific aspects my premises are based on the reports of the Intergovernmental Panel of Climate Change (IPCC), which, in my opinion, reflect state-of-the-art knowledge¹, although I am aware that some experts strongly disagree with this assessment (e.g., Boehmer-Christiansen 2003; Boehmer-Christiansen and Kellow 2002; see also Miller and Edwards 2001). According to the IPCC reports, there is increasing global warming due to the cumulative emissions of various greenhouse gases (most prominently CO₂), and a significant part of this effect is 'human-made.' If excessive global warming is not prevented, it will have destructive consequences for humans and nature, although in an asymmetric way: those who are, by social and economic standards, already worse off (primarily in developing countries) will suffer most (IPCC 2001a, 2001b).

In spite of more than two decades of intensive international negotiations, CO₂ emissions are on the rise worldwide: in 2003 they were almost 20 percent higher than in 1990. About half of all emissions are produced by industrial countries. However, there also has been a strong increase in CO₂ emissions in developing countries. Currently their share is about 45 percent of global emissions, and it is projected that there will be a dramatic rise in their emissions in the near future due to a large increase in their energy consumption and their strong reliance on coal and other fossil fuels. This is especially the case in Asia, where China and India are particularly large energy consumers because of their large population sizes.² At present, the United States is the world's largest CO₂ emitter while Germany ranks sixth (after China, Russia, Japan and India). In contrast to the U.S. government, the German

1 The IPCC represents the international scientific consensus of governments and independent scientists.

2 Cf. Energy Information Administration/International Energy Outlook 2004 (IEO 2004) by the U.S. Department of Energy, published in April 2004.

government accepted rather early on the responsibility to strongly reduce the country's emissions of greenhouse gases as a contribution to global equity.³

The primary questions this paper seeks to answer include the following: What are the political and practical implications of normative concepts, such as equity, for German climate change policy? What role do the crucial questions of global justice and local fairness play in German local sustainable development activities (Local Agenda 21 processes)? And how are evolving 'cosmopolitan' norms, like global environmental justice, influenced by existing fundamental values embedded in the political culture of a country?

Equity is a key element of the sustainability discourse which evolved from the SD concept that was popularized by the so-called Brundtland Report of 1987 and the Rio Conference of 1992. It has become a 'metafix,' a central ethical referential norm intended to guide international and national climate change mitigation policies. Equality, 'futuraity,' and equity—defined as social or distributional justice/fairness—are the leading moral and political requirements of the SD concept, i.e., they are norms not only to be observed but to be actively pursued. This follows from the ideas of intergenerational and intragenerational justice that are constitutive elements of the SD concept (WCED 1987).

As both SD and equity are vague and contested concepts or ideas, it is necessary to take a closer look at their relationship to each other as well as to other norms and values in a given society with which they might conflict. Moreover, cross-cultural variances in the definitions and importance of these concepts might affect politics and policies. Furthermore, the acknowledgment of fundamental or universal ethical norms is crucial for the success or failure of global policy, because "in a situation in which co-operation of many rational and self-interested agents [is necessary], it will always pay for the individual to defect, rather than to collaborate" (Rothstein 1998: 157; see also Olson 1965).

Not only varying norms might clash and need to be reconciled, policy concepts resulting from international negotiation processes usually also have to face established policy approaches 'at home' that are embedded in the broader context of politico-administrative institutions. Thus, the compatibil-

3 Within the framework of the EU's 'burden sharing' system, Germany has committed itself to lower its greenhouse gas emissions by 21 percent (on the basis of 1990 values) until 2008/2012.

ity of new and old, imported and existing ‘soft- and hardware’ institutions is decisive for the functioning of the political process and often explains why new policies sometimes succeed and sometimes fail. The potential trade-off between generally accepted norms and policies from ‘outside’ and ‘inside’ will usually be the more important the more trade-offs are recognized by the actor groups concerned *and* the more they realize that policies will be introduced that will affect them. Even if it is widely acknowledged in a country that principles of (global) fairness and not instrumental rationality, based on a narrowly defined national self-interest, should guide governmental policy, it makes sense to look at the extent to which these principles are congruent with existing practices and their underlying norms. Therefore, an analysis of the ‘new’ global climate protection policy must not only consider established norms of cooperation, solidarity, equity, etc., but also existing environmental policies and their political context. In Germany, for instance, ‘public interest’ and ‘ecological modernization’ are examples for such established institutions.⁴

The first part of this paper aims at a brief clarification of the meaning and significance of equity (social/distributive justice/fairness, focusing on the distribution incidence of policies and norms) with respect to SD and policies addressing climate change. The analysis will focus, in particular, on differences in what is meant by equity *between* and equity *within* nations. This will lead to a discussion in section two of the tensions and congruencies between the leading environmental policy paradigms in Germany, namely ecological modernization (EM) and sustainable development (SD), as well as the idea of public interest (‘common weal’, *bonum commune*, *Gemeinwohl* in German) and the various forms of equity demands contained in the SD concept. These clarifications will serve to inform section three, which describes and analyzes German environmental policy, focusing on EM, SD, climate change mitigation and related energy policies, and Local Agenda 21 processes. In the more empirical section four attitudes and commitments of the general public and main actor groups with respect to global climate change and equity issues will be analyzed. Taking Local Agenda 21 processes in Germany, which typically involved a multitude of stakeholders, as examples,

4 The term “institution” is used here in the broader sociological sense of organizations with a physical structure as well as traditions, customs, norms and principles of conduct that shape human interaction, stabilize expectations and influence the resolution of disputes: also over common property resources.

the role equity issues are playing in concrete policy activities related to SD at the local level will be considered. Finally, in section five the findings of the analysis will be discussed from the perspectives of global equity and (national) public interest.

1. Climate Change Policy and the Concept of Equity

Sustainable Development (SD) could be seen as a global ‘regulative idea’ (in the Kantian sense) that addresses especially the inequities related to the use of global common goods. ‘Global Commons’ (cf. Kaul et al. 2003) are goods everybody has an unwritten equal right to use. Like public goods, they are characterized by non-rivalry in consumption and unlimited access. They are, thus, “public goods with benefits—or costs, in the case of such ‘bads’ as crime and violence—that extend across countries and regions, across rich and poor population groups, and even across generations” (Kaul et al. 2003: 3). The atmosphere (the global climate) is perhaps the best example of a global public good in the environmental area. However, usually those who are most disproportionately hit by the consequences of environmental pollution, resource depletion, and supposed climate change are economically and socially disadvantaged and live mostly, but not exclusively, in developing countries (the ‘South’). And, as a rule, they have contributed least to global environmental problems (IPCC 2001a⁵). Consequently, “the contemporary challenges of global environmental change are those of displacement across time and space. They are, therefore, intimately bound up with questions of justice and equity” (Elliott 2002: 61). Correspondingly, among the central questions in designing climate protection policies ought to be the following: Is there any unjust inequality leading to unfair distribution of burdens and benefits (equity) and, if so, how should it be dealt with, acknowledging that equal treatment does not necessarily result in fair outcomes? This inevitably involves issues related to distributional fairness and re-distributional policy—usually the most conflict-prone aspects of governance (Lowi 1972).

There are many competing and controversial principles and concepts related to equity that are based on different normative arguments and axioms

5 See also *DIW-Wochenbericht*, No. 42/2004, pp. 615-622 (‘Die ökonomischen Kosten des Klimawandels’); WBGU (2004b).

stemming from a discourse on justice that is more than 2000 years old.⁶ Equity—as used in economics and political science—usually means social and distributive justice, which generally refers to the ‘fairness’ of distributing benefits and burdens among individuals and within and between groups, communities, and nations. A definition of the notion of ‘international environmental equity’—attempting to capture most of the various interpretations of equity used in international environmental deliberations and agreements—is provided by Harris (2001: 25) as “a fair and just distribution among countries of benefits, burdens, and decision-making authority associated with international environmental relations.”

One of the important landmarks in the process of international climate change negotiations—the Framework Convention on Climate Change (FCCC) of 1992 (in force since 1994)—addresses the equity issue by confirming ‘common but differentiated responsibilities’ of all nations. Based on this formula, it established a specific obligation for industrialized countries to take the lead in mitigation efforts since they are responsible for the largest share of emissions and can better afford action. Furthermore, the advanced industrial countries accept the additional obligation to support developing countries with their climate policies and their adjustments to climate change.

The qualification “common but differentiated responsibilities ...” could be traced back to the Aristotelean principle of proportionality “which entails parties making concessions and accepting burdens in proportion to their ability to do so” (Albin 2003: 267). Notwithstanding the need to qualify ‘equity’ and the lack of a widespread agreement on its meaning among various actor groups (in that sense it is as vague and contested a concept as SD and public interest are), as early as 1992 (Rio Summit and FCCC), the international community agreed that the climate system must be conceived of as a global public good and that policies should be guided by concerns for equity between present and future generations. Perceptions of justice and equity have become an important, if not *the* most important feature of global environmental politics and play an important role in the design of climate protection policy (cf. Eckersley 2004).⁷ At the very core of the international climate

6 Equity issues are dealt with in depth, for example, in Barry (1991), Dworkin (1983), Elster (1992), Franklin (1997), Kersting (2000), Miller and Walzer (1995), Rawls (1971), Roemer (1996), Walzer 1983 and 1994, and Young (1990).

7 However, notions of (negatively affected global) equity/fairness were not the most important driving force for initiating international climate policy negotiations but evidently the

policy regime that has been evolving since the 1980s are the United Nations Framework Convention on Climate Change (UN FCCC) of 1992, the Kyoto Protocol of 1997 and the Marrakech Accords of 2001⁸ (see Meadowcroft 2002). The FCCC states in Article 3.1: “The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.”⁹

It was the original United Nations Conference on Environment and Development (UNCED) objective to stabilize greenhouse gas emissions at 1990 levels by the year 2000. The Kyoto Protocol of 1997 then fixed in more detail the objectives, tasks, and responsibilities of nations by, *inter alia*,

- defining which gases are to be dealt with,
- dividing the world into groups of countries with different responsibilities for emission reductions,
- setting the reference units of greenhouse gases as total emissions *per country* (but as a result of *bargaining*, not pure application of a principle of equity),
- fixing the year 1990 as the base year for measuring reductions, and
- fixing the period 2008-2012 as the time frame within which the agreed reductions are to be achieved by industrialized countries.

Under the Kyoto Protocol the European Union (EU) is responsible for an 8 percent reduction of greenhouse gases relative to 1990 levels by 2008-2012. Based on this goal, the EU member countries calculated individual obligations for emission abatements. *Germany*, by pledging to achieve a 21 percent reduction relative to its 1990 emission levels by 2008-2012, has taken (voluntarily) the largest share of the burden on the EU. This EU-related target is even excelled by the earlier voluntary *national* commitment made by the

concern to mitigate the expected (primarily indirect) negative consequences of climate change for industrial countries (see Oberthür and Ott 1999, O’Riordan and Jäger 1996; see also Rose and Stevens 1998, Rose et al. 1998).

8 The Marrakech Accords (2001), reached at the 7th Conference of the Parties of the Framework Convention on Climate Change, contain, *inter alia*, agreements on detailed rules for the actual operation of the Kyoto Protocol and establish three new funds to assist developing countries with their climate change policy.

9 One of the reasons the U.S. Government gave for why it did not ratify the Kyoto Protocol was that no ‘meaningful commitment’ to greenhouse gas reduction has been made by the developing countries.

German government to reduce CO₂ emissions by 25 percent of 1990 emissions levels by 2005.

All in all, since the 1990s Germany has not only been a pusher in global climate protection policy (see Jänicke and Weidner 1997) but also—judged by its policy objectives and concrete measures—a strong supporter of the principle of international environmental equity as the guideline for international negotiations (cf. BMU 2000a). This put Germany at the forefront of an equity-based global climate change policy.

Germany's progressive attitude is generally applauded by the proponents of environmental and development policy, especially the various NGOs, unless they demand even stricter commitments. Furthermore, surveys show that a majority of the German people support or at least accept the government's engagement in climate policy based on equity principles (Grunenberg and Kuckartz 2003: 169 ff.). At a general level, there seems to be a broad, but mostly tacit consensus about the fairness of governmental policy with respect to climate change. This, however, could be largely the result of lacking information on the actual equity effects that related policy measures have or can have *within* Germany. Anyway, it is noticeable that distributional effects of climate policies for all groups in German society are hardly ever discussed broadly and in detail¹⁰ in the scientific and political public, and government-commissioned studies on these issues are very rare and not comprehensive (see, for instance, UBA 2003). The government, NGOs and large parts of the scientific/expert community seem to imply that distributive effects of international commitments within the country are negligible (or even desirable to change consumption and production patterns). Only business groups and trade unions sometimes utter worries, though not about equity effects but potential negative repercussions on competition and employment.

All in all, it seems to be central to the general discussion of the principle of equity (distributional justice) at the international level of climate policy negotiations that it is mainly concerned with equity *between* states (or 'North' and 'South') and that the consequences of climate policy on equity *within*

10 This is the case although there is a lack of "consensus about the effect of different policies and mechanisms on various distributional issues" (Wiegandt 2001: 127), which could be termed the indirect effects of equity-related policies: Distributional effects are not only a result of 'pure' equity-related decisions; they also vary according to the type of instrument selected for implementation (see Sprenger 2004).

countries are widely (and, for political reasons, sometimes deliberately) ignored (Wiegandt 2001: 140, Boehmer-Christiansen 2003). Although some governments, especially the U.S. Government, have thematized this issue, they could not provoke a differentiated discussion on equity consequences within developed countries. Usually—and by and large quite correctly so—their arguments are perceived as being used to cover up selfish interests which guide their negotiation strategy.¹¹ Furthermore, the distributional impacts of international commitments (including the concepts, objectives, mechanisms, and instruments of climate policy) are mainly framed as a problem of fairness and retributive justice between developed and developing countries, the ‘North’ and the ‘South.’¹² This kind of problem framing is backed by sophisticated arguments that boil down to the conclusion that the developed countries have a comprehensive, long-term and general duty to shoulder the burdens of mitigating climate change and to enter far-reaching general obligations to help the poor countries (see Shue 1993, 1999). However, this position, as a rule, ignores or plays down the fact that the “juxtaposition of ‘developed’ and ‘developing’ countries” (Ott and Sachs 2000: 10) does not fully reflect social and economic realities. The assumption “that states are relatively homogeneous internally shields the fact that huge disparities among social classes exist within states” (*ibid.*), no matter if they belong to the South or to the North.

The ethical-normative debate on climate change within Germany’s scientific community tends to view the equal per-capita right to CO₂ emissions as being the most equitable. Most environmental and developmental NGOs as well as ecclesiastical groups and institutions also take this stance. Despite a

11 “Equity is an intriguing aspect of the climate change issue. One can witness a strange mixture of well-taken and fully justified arguments about historical responsibility, current ability to pay for climate policies, and future vulnerability and long-term benefits of emission abatement. Yet, equity principles are often used as a veil to hide the real interests associated with greenhouse-gas related resources or production capacities and to avoid or delay action. Attempts to manage the climate change problem often appear to be a battle field of conflicting interests. Fairness concerns offer almost unlimited possibilities to support diverse camps!” (Tóth 1999: 8).

12 This judgment is based on the ‘moral framing’ of the issue. However, the setting of targets for emission limits and time tables in developed and transition countries (Kyoto Protocol, adopted in 1997) was informed by a multitude of criteria (e.g., differing historical responsibilities for creating the greenhouse effect, the countries’ different economic, technological, and energy situations). All in all, the differentiations made cannot be traced back to a consistent rule but predominantly to the objective of the driving countries in the negotiations to achieve an acceptable result, covering as many countries as possible. Thus, the reduction targets are widely recognized as purely political (cf. Babiker and Eckaus 2000).

more implicit than explicit rejection of this position by most politicians, public administrators, entrepreneurs and many economic experts for being politically impractical, “it remains the most persuasive argument on ethical grounds” (Paterson 2001: 124). Currently, due to a lack of empirical data, it is uncertain how the general public in Germany views this question. It must also be kept in mind that the distributive consequences of this approach are not clear and that Germany has for quite some time been experiencing a deep economic recession, a loosening of the ‘social security net’ and an erosion of the national ‘intergenerational contract’, a core element of Germany’s social security system. There are not a few who are afraid that these trends could lead to a significant decrease in solidarity between the German majority and weaker groups inside and, especially, outside national boundaries.

According to Gallopín and Nilsson (2000), distributional effects are politically highly sensitive in all kinds of policy-making settings. Even in cases where the macroeconomic effects of public policies are believed to be small or even generally positive, usually some sectors and groups will suffer (unless compensatory policies are designed to minimize negative and regressive distributional effects).¹³ Distributional effects of CO₂ policy can be categorized roughly along three dimensions:

- “Income structure: depending on the socio-cultural structure of the population, and whether energy consumption is somehow related to income ... [often affecting] low-income groups.
- “Sectorial: CO₂-intensive industrial sectors and products will suffer initially; over the longer-term, effects will ripple through the economy and all sectors will be affected. However, it is also believed that the economy will be able to adjust in the long-run, altering the sectorial structure.
- “Regional impacts: there are three hypotheses regarding these impacts. First, remote areas may suffer due to the large transportation distances and potentially increased transportation costs. Second, to the extent there are regional income differences, regions with lower incomes will suffer according to the first point above. Third, regions with

13 A *regressive* distributional effect describes a greater negative impact on the personal income of lower income groups than on higher income groups (or, in other words, the lower income group benefits much less from a certain policy).

carbon-intensive industrial sectors will suffer according to the second point above” (Gallopín and Nilsson 2000: 49; see also Gallopín 2000, Sprenger 2004, Böhringer, Finus and Vogt 2002).

Whether and how potential effects are communicated and handled by relevant actor groups will be analyzed and discussed in Section 4. In order to obtain a balanced view, the direct and indirect positive effects of climate change policy measures, such as improved employment rates, health, amenity, etc., will be considered.

2. The Concepts of Ecological Modernization (EM), Sustainable Development (SD), and Public Interest: Basic Differences and Similarities

In order to remain effective, a sustainable climate/energy policy in Germany must be based on citizens’ motivation to accept a burden on themselves for the sake of remote objectives. The potential consequences of a specific policy on equity depend, *inter alia*, on the ‘paradigm’ (the overall policy concept) chosen to guide activities in a particular policy area. It makes, for instance, a difference in income distribution if socioeconomic policy is based on social market economy or neoliberal ideology. The same applies to the mode of internalizing external effects with selected environmental policy instruments (e.g., polluter-pays principle versus the-public-pays principle) and the core strategic concept underlying governmental policies to manage global environmental challenges and natural resources.

In most countries with an advanced environmental policy, the paradigms of either EM or SD (or a combination of both) form the environmental policy framework (Jänicke and Weidner 1997, Weidner and Jänicke 2002). In Germany, both ideas enjoy, *cum grano salis*, high acceptance at the various governmental levels, among most NGOs, environment-related and developmental institutions, and also many corporations.¹⁴ For example, the current ‘red-green’ government (coalition of the Social Democratic Party and Alliance 90/The Greens), in office since 1998, and the ‘leading ministry’ in this policy

14 A survey on ‘sustainable management’ indicated that more than half of the 309 corporations included do also consider social and ecological effects in their decision making processes. The most important motives for this policy are: motivation of employers, advantages in competition, expectations of customers and legal regulations. Ethical reasons and good neighborhood rank 7 and 10, respectively (see *iwd*, Vol. 30, No. 47, 18 November 2004, p. 8).

area, the Ministry of the Environment, have made a combination of both ideas the leading paradigm of the official government strategy: “The Federal Government ... responded [to environmental challenges] with a policy of eco modernization ... Germany’s modernization is based on the model of sustainability” (BMU 2002a: 12). A brief sketch of an EM program was already an element of the coalition contract of 1998. Although the general idea of SD enjoys wide rhetorical support in Germany, the concrete policies of administrations, institutions, and organizations are much closer affiliated to the idea of EM than to SD as will be shown below.

The two ideas, despite some similarities, have quite different historical roots and different frames of reference. They are related to different discourses, directed towards different problems and contain divergent goals and targets as well as approaches for implementation. And—as an inevitable consequence—they will result in partly highly different impacts (including equity effects) on various social groups, both nationally and globally. These are convincing arguments, “why ecological modernization and sustainable development should not be conflated” (Langhelle 2000: 303). Therefore it makes sense to clarify briefly the meaning and the main characteristics of the two concepts, although this is not an easy task. As yet, both ideas have not been cast into clearly defined and widely accepted concrete concepts. There still are many competing definitions. This especially concerns SD. Since this is not the place to give a broad and in-depth discussion of the various forms currently discussed (see Christoff 1996, Mol and Sonnenfeld 2000, Lafferty and Meadowcroft 2000, Weale 1992, Hajer 1995), I will concentrate on the (‘mainstream’) concepts that influenced the German environmental policy discourse. The concept of SD will be given more room as it is the reference concept for the discussion of equity issues.

2.1 Ecological Modernization (EM)

The idea of EM is defined in various ways. Some use the idea to characterize changes in the environmental policy discourse, others relate it to an upcoming system of new beliefs and values, and for others again it is nothing more than a description of a special kind of technology-oriented policy.¹⁵

15 See the excellent comparative analysis of EM concepts by Langhelle (2000).

In Germany, the definition with the greatest influence on politics and policy and for the ongoing theoretical debate dates back to political scientist Martin Jänicke who had introduced this concept in the early 1980s. In a recent paper (Jänicke 2000), he distinguishes between two interpretations of EM, a broader ‘cultural’ one and a narrower ‘technocratic’ one (see also Christoff 1996, for versions of ‘weak’ and ‘strong’ EM). Jänicke pleads for reserving the term EM for the narrower technocratic interpretation, especially in order to avoid disguising its weaknesses. According to him the original ‘economic-technical core’ (Jänicke 2000: 5) of the EM concept is the development and application of ecologically sound and future-proof technologies by using the inherent mechanisms of the capitalist industrial system to strive for innovation. He recommends restricting the use of the term EM to (mostly incremental) innovations (and their diffusion) to increase eco-efficiency in all sectors of society.

From an historical perspective, EM appears as an evolutionary step in environmental policy development, representing the new paradigm that succeeded the concept of advanced end-of-pipe approaches (Jänicke and Weidner 1997, Weale 1992). It evolved as a reaction to the obvious shortcomings of its predecessor. Thus, EM as a modernist, technology- and efficiency-oriented approach to environmental problems implies a shift from a remedial to a more anticipative (precautionary) strategy. EM, according to Jänicke, should also be distinguished from the “more difficult, ... often unsuccessful, but indispensable path of ecological restructuring beyond the merely technical options” (Jänicke 2000: 7). The main distinguishing feature of *structural ecologicalization* is that it is not based on “marketable technologies and thus cannot use the inherent logic of the economic system” (*ibid.*) as its driving force, i.e., where the development of marketable technological solutions is evidently impossible in a short- to medium-term perspective. This politically highly demanding concept of ‘ecological restructuring’ must be based on ‘radical innovations’ directed at the roots of environmental (!) problems, because incremental increases in eco-efficiency do not guarantee a sustainable solution. As this approach in most cases will face opposition by powerful actor groups and usually does not relate to win-win strategies (and rather results in zero or minus sum games), there is a strong need to develop adequate strategies for dealing with potential ‘modernization losers.’

The analysis of the *mainstream* EM model—the ‘economic-technical version’ according to Jänicke—demonstrates that equity concerns are peripheral to the concept. Distributive and re-distributive—national or global—consequences of EM receive only little attention from its proponents. Equity issues only come to play an indirect and implicit role in two different ways. First, from a strategic point of view, the concept suggests to mitigate social and economic impacts of EM plans or activities and to win consent from potential ‘losers’ and their supporting groups. This addresses primarily the ‘big players’ with strong veto power, like the coal mining industry and related trade unions. Secondly, from a macro level perspective, it is assumed that EM policy will *in balance* be a positive sum game, resulting in gains for the society as a whole, both in economic (increased employment, income, profit, etc.) and environmental terms (reduced pollution loads, less pollution-related health problems, better quality of life, etc.). This overall gain would also allow for compensating losers, which is particularly necessary if they belong to powerfully organized groups. The (narrow) EM concept already puts more emphasis on future generations than conventional environmental policy, and the broader concept of ‘structural ecologicalization’ strengthens the futurity aspect to such a degree that one might speak of sustainable EM (or ecological sustainability). Yet, this stronger emphasis on long-term effects is mainly a result of the previous concept’s failures to stabilize achieved improvements and not of considerations of intergenerational justice. In principle, Langhelle is right in saying that ecological modernization as such “has no established relationship neither to the global environmental problems nor to social justice. There are ... no explicit references or connections at all to the global dimension of developmental and distributional problems. As such, ecological modernization is neither concerned with social justice within our generation (intragenerational justice) or with social justice between generations (intergenerational justice)” (Langhelle 2000: 309).

The next section will make clear that there are substantive differences between EM (even if taken in its broad version as ‘ecological restructuring’) and SD but will also point at enormous differences between SD and the idea of public interest, the latter having much more in common with the EM concept.

2.2 Sustainable Development (SD) and Public Interest: Differences and Similarities

While ecological modernization is, at its core, a market-oriented policy concept focused on environmental issues, sustainable development is a global societal reform concept, in which ecological aspects play an important but not *the* dominant role. SD could be defined briefly as a framework concept to realize *global* public welfare, embracing economic, social and ecological well-being. This could be seen as shorthand for *global* public interest. Of course, the protagonists of EM would claim that this concept will also contribute to global public welfare if it diffuses globally. However, the decisive point here is that this effect is envisaged as a related side-effect but not as the central goal of EM.

Relating SD to the concept of public interest might suggest a harmonious relationship between both, which is not the case. Public interest (*Gemeinwohl* in German) is a well-established albeit contested norm or ideal standard in many societies. It represents key values, aspirations, and objectives of a community or polity, and it “calls for the readiness of the citizen to make sacrifices if necessary and to share responsibility for sustaining values of the polity” (Herring 1972: 171). It “is viewed as the objective of the duly authorized organs of government ...” (*op. cit.*, 170). Issues of general relevance in social interaction are often debated in terms of the public interest and at the same time in terms of associated ideas and values, such as equity. If public interest is conceived as assuring the provision and some equitable distribution of certain basic (especially common) goods, its closeness to the basic idea of the SD concept becomes clear.

This leads to the question of what the relationships between the two concepts (or visions) are like. Do they conflict with each other or are they mutually supporting? This question is of normative and practical relevance, and it can help clarify how equity concerns will be dealt with in a given society. One can assume that the acceptance of a new collective norm that calls for acknowledging the interests of ‘others,’ implying (re-)distributional effects, will face fewer difficulties if the new norm corresponds to already existing normative systems and values. On the other hand, if such a fundamental concept like public interest conflicts with new norms, we may expect low acceptance. A comparison of the similarities and differences of both concepts can help identify potential conflicts related to the implementation of the SD concept.

The analysis of the kind of potential conflicts and their degree of severity can also show what kind of capacity building is still needed to mitigate these conflicts.

In the rhetoric of public interest, the *sustainability discourse* has so far left hardly any trace. In terms of origin and age public interest and SD are like old nobility and parvenu. While public interest has a tradition going back at least to antiquity—an imposing number of the greatest philosophers of all time (like Plato, Aristotle, Seneca) have contributed to shaping the concept—sustainability has its historical roots in the timber industry of the early 18th century.¹⁶ But the concept was to gain popularity only in 1987 with the final report of an international expert commission chaired by the then Norwegian Prime Minister, Gro Harlem Brundtland. Nevertheless, the two concepts relate in many dimensions in a more than loose and accidental manner. They share the meta-reference norms *equity*, equality, public welfare, and public goods; this unites them both in their ambivalent relationship with the idea of individual freedom and with regard to the fundamental liberal notion that the pursuit of self-interest benefits the whole. Both are cases of practical philosophy directed towards ensuring a ‘good life’ for all. The two almost inevitably diverge at the realization level; the type and amplitude of goal conflicts can vary considerably depending on the specific conceptions of public interest and sustainability at issue. Since, by their nature, both concepts are based on values in progress and often react to different challenges, there is a state of tension between them that cannot in principle be resolved in advance.

2.2.1 Sustainable Development

In 1987, the World Commission for Environment and Development (WCED) set up by the United Nations (UN) presented its final report under the title ‘Our Common Future’ (WCED 1987). Basically, the goal of the commission was to elaborate a social development concept linking ecology and economy in a socially acceptable manner and offering attractive future prospects for both wealthy and (especially) poor societies. The expert group, also referred to as the Brundtland Commission after its chairperson Gro Harlem

16 The concept of sustainability (*Nachhaltigkeit*) was coined in 1713 by the *kursächsischer Oberberghauptmann* (chief mining official for the Electorate of Saxony) Hans Carl von Carlowitz.

Brundtland, coined the famous formula stating that sustainable development was the form of economic, ecological, and social development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED 1987: 8).

The leap from an environmental and development concept that had attracted worldwide attention (Brundtland Report) to the principal guiding vision of a new global policy was prepared by the UN Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992 (‘Rio Conference’). At this conference 178 countries, among them Germany, agreed to make sustainable development a basic element of their national and international policy.

The Brundtland Report did not limit the sustainability concept to the preservation of an intact environment but applied it generally to safeguarding the life basis of humanity (cf. Hauff 1987: 10); with this in mind, even exponential economic growth was considered necessary (*op. cit.*: 54-55).¹⁷ Although the industrial countries managed to put environmental issues high on the agenda at the second environmental summit in Rio (as they did at the first summit in Stockholm 1972), economic and social (including distribution) issues were given a great deal of space. This is reflected in the Rio Declaration: “The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations” (Principle 3). The two poles of the modern notion of sustainability are thus environmental and resource protection and socially equitable economic development.

In comparison with all, including progressive, variants of ‘environmental policy,’ the sustainability concept is much more normatively charged. Taking a cosmopolitan perspective, it is directed towards structural change and redistribution in world society, and—extending beyond the intersection of ecology and economy—is integrative and even holistic in application. How the

17 As regards the status of conventional environmental issues in the framework of the mandate, the Brundtland Commission stated clearly that an anthropocentric concept of the environment underlay their sustainability concept: “When the terms of reference of our Commission were originally being discussed in 1982, there were those who wanted its considerations to be limited to ‘environmental issues’ only. This would have been a grave mistake. The environment does not exist as a sphere separate from human actions, ambitions, and needs, and attempts to defend it in isolation from human concerns have given the very word ‘environment’ a connotation of naiveté in some political circles” (WCED 1987: xi).

concept of sustainability relates to that of public interest depends on which variant is taken.

Three types of concepts (see Pearce and Barbier 2000, Neumayer 1999, Turner 1993) have become established in the discussion among experts (hardly noticed by the public): ‘weak’, ‘strong’, and ‘reasonable sustainability.’ Common to all three sustainability concepts is that they describe the economy, the natural environment, and the social sphere as capital stocks which in varying measure can be considered mutually substitutable.

In general, an understanding of sustainability as a framed process, based on the concept of *reasonable* sustainability, is likely to find the broadest consensus in politico-social practice. In this sense sustainability serves as a ‘regulative idea’¹⁸ in an ongoing process of societal search, learning, and discovery, which—invariably in multifactor optimization tasks—is essentially open-ended and weakly determined, even though the range of options is often restricted by discourse ‘guardrails.’

The three concepts make highly divergent demands on scientific and political competencies and on societal capacities for compromise. Similarly, their intersections with the public interest concept vary, as does their integrability in the public interest discourse. A strong conception of sustainability, for example, which seeks to limit access to natural resources for today’s societies strictly in obedience to a natural-law logic would inevitably create major centers of socioeconomic conflict in affluent societies and especially in poor societies. The same is to be expected from a physiocentric sustainability approach. Under the current conditions of welfare production and the affluence gap, a combination of these two demands would amount to inviting social strife. Admittedly, relations between a pragmatically modified sustainability concept and the public interest are also not free of conflict, as will be shown in the following.

Mainstream Concept of Sustainability

Characteristic of a sustainability concept apt to attract broad acceptance in all relevant groups of society are the following requirements and criteria (SRU

18 As far as I am aware, the Kantian ‘regulative idea’ was first introduced into the sustainability discussion by Homann (1996); Fraenkel (1964), in particular, has used this figure in the public interest debate.

1994; DIW, WI and WZB 2000)—over and above the basic postulate that the central development parameters for humanity and the environment must ensure the lasting capacity of the human community to survive and develop:

- moderate anthropocentrism;
- improvement in the present balance of material and immaterial living conditions in the developed and underdeveloped countries and between them (intragenerational equity);
- ensuring that future generations can satisfy their needs (intergenerational equity);
- an integrative view of the social, economic, and ecological development conditions and problems, since these areas are regarded as being so closely interrelated that permanently satisfying development cannot be achieved in any one field if others are neglected;
- the endeavor to conserve and develop different, to some extent interchangeable and mutually compensative capital stocks;
- the assumption of equality between the three central dimensions ecology, economy, and social affairs as prerequisite for the sociopolitical discourse;
- change in the present path of economic and social development because it does not do justice to the criteria of permanently environment-friendly development.

The sustainability concept thus described reflects crucial core elements of sustainability as conceived by the Brundtland Commission, the important international organizations (from OECD to World Bank), and national institutions—in Germany, for example, the Council of Environmental Experts, and the Bundestag Enquête-Kommission (Inquiry Commission) ‘Protection of mankind and the environment.’¹⁹ This understanding is more controversial

19 All the institutions mentioned—and others—have further differentiated these core principles to make them practicable for political purposes. Varying progress has been achieved in the consensual operationalization of the concept. The greatest headway has been made on the ecological dimension, followed by the economic dimension; the social dimension, in contrast, was long neglected in both the scholarly and societal debate, so that the least advances in knowledge have been attained in this domain (cf. UBA 1995: 22 ff.; Deutscher Bundestag 1997; Weidner and Brandl 2001). The joint research project ‘Work & Ecology,’ in which the WZB participated, was particularly concerned with social aspects. The social dimension of sustainability was specified with reference to the normative social philosophy concept of the ‘good life,’ defining sustainability as enabling a self-determined ‘good life’ with a commitment to the precautionary conservation and improvement of the natural environment; individual preferences are to be taken into account in such a way that permanent incentives are provided to ensure economic performance directed towards this goal in a global perspective (DIW, WI and WZB 2000: 46).

among scholars than among societal practitioners and the general public. The broad consensus of the latter may ultimately be attributable to the fact that the distributive and re-distributive consequences of the intragenerational equity postulate (even the global ones!) are difficult to envisage, and are ignored, suppressed or considered avoidable.

Despite the much censured ‘empty-phrase’ nature of the concept (the criticism being that everyone can interpret into it whatever suits him or her) and disregarding low public awareness, the sustainability idea set in motion a worldwide diffusion of institutional innovations without precedent in the environmental policy field during the last two decades or, for that matter, in other policy areas (Weidner and Jänicke 2002; Weidner 2002a; Lafferty and Meadowcroft 2000; Carter 2001: 194 ff.; Dodds 2000). Sustainable development has progressed to become a major, cross-cultural guiding vision for shaping national, regional, and local development processes and world society as a whole. With few exceptions (e.g., Attac), the SD concept is, at the same time, the greatest common platform for criticizing neo-liberal tendencies of globalization processes.

2.2.2 Environmental Interest, Public Interest, and Sustainability: Tensions and Interaction

In the course of its development, the initially mercantilist concept of sustainability has evolved into a cosmopolitan public-interest concept. The unbounded nature of ecological relationships and the consequent interdependence of all people and places on Earth create a real (not merely morally constructed) common social context of global dimensions in the sense of “an overarching *relational and social space* between rich and poor” (Habisch 2001: 259).

While the ‘environmental interest’ is increasingly thematized as a resource for safeguarding the survival and quality of human life, sustainability is coming ever closer to becoming a public-interest idea, measured primarily in terms of social equity (with strong equality and solidarity postulates) (cf. Diefenbacher 2001; Langhelle 2000). A sustainability concept that vests the natural environment with absolute intrinsic rights (‘co-world’ concept) equating it with other collective (or constitutional) protected goods, would, in contrast, run counter to the predominant understanding of public interest (cf. Neidhardt 2002).

How does the sustainability concept that has emerged from a global discourse—in which, it must be said, the countries of the North have had the loudest say—relate to the more Western concept of the public interest?²⁰ The question is of more than abstract, conceptual-systematic interest. The options and desiderata for political practice vary depending on the constellation. They help towards finding passable paths to intercultural understanding and compromise.

For modern pluralist societies, a minimum of understanding among the various groups about the idea of public interest is prerequisite for any compromise reconciling the public and private interest²¹: “The public interest in the State under a democratic constitution arises from the equitable balance between the various interests, the result of compromises that are achieved in accordance with generally recognized rules in the framework of a regulative value idea (idea of consensus)” (Fraenkel and Bracher 1970: 73-74). If public interest is understood as a ‘regulative idea’ (Fraenkel 1964: 42), the decisive question is not what the public interest actually is but who decides it when and where. The focus shifts to procedures within the space of its political scope of application. Its purpose is to further the general welfare and, by ensuring equitable opportunities for individual groups, to help settle differences and establish societal integration. On the other hand, the public interest concept is to curb individualistic sectional interests that run counter to this goal: “[T]he public interest stands for the broad versus the narrow, the more inclusive versus the limited” (Herring 1972: 170).

The prerequisite indispensable minimum of common values and the balance of interests among all involved in the framework of a recognized procedure based on the rule of law restrict the idea of the public interest as a maxim for political action to the nation state and its subdivisions,²² where, according to the prevailing view, a sense of community can (still just) develop in a robust manner. This is reflected, for example, in the acceptance of personal disadvantages in the general interest, in the setting aside of utility

20 On the notion of public interest and public interest concepts, see Münkler and Fischer (2002), Schuppert and Neidhardt (2002).

21 The radical rejection of a public interest notion as a moral point of reference for criticizing and shaping societal conditions and processes—as espoused by Marxists and ‘hard’ pluralism theoreticians—has remained a minority position.

22 The public interest is defined as “the general and common welfare of the citizens of a community organized as a state,” its realization is considered “the supreme task of government and quasi-governmental action” (Görres-Gesellschaft 1986: 859).

considerations in favor of equity objectives, or in the prioritizing of ‘sociability aspects’ over merely individual benefit calculations. Central to this is a rather strong belief or trust in (at least the fiction of) *reciprocity*: Namely that those benefiting from the change of cost-benefit calculations made deliberately by others in their favor will (1) acknowledge the norms and values underlying their benefactors’ refraining from a possible realization of their own interests and advantages and (2) strive to act in accordance with these norms (i.e., demonstrating cooperative behavior) in the medium or long term by themselves.

Comparing Public Interest and Sustainability

Social equity and equality are among the basic reference values of both public interest and sustainable development. Both approaches seek to place the utilitarian *homo oeconomicus* in a normative shell that not only safeguards freedom but also secures social integration. The two concepts also exhibit differences, sometimes considerable. They are due primarily to different space and time perspectives, both of which are far more limited in the case of the public interest concept. The *national* public interest ranks higher than the *global common good*, the interests of current generations come before those of future generations. This limits the willingness to recognize universal equity and solidarity as binding yardsticks for personal action, or to restrict oneself today for the benefit of a distant posterity and accept the risk of economic structural change. In times of rampant globalization with its turbulent consequences for national economies, social security systems, and individual lifestyles, this willingness tends to diminish despite a growing realization that complex global effect chains increasingly impact national welfare (cf. Beckert et al. 2004). The public interest concept appears normatively under-complex and deficient in the face of global challenges, while the sustainability concept seems normatively insensitive to domestic welfare interests of industrial countries.

If the public interest concept would incorporate SD, then globality (concern for more than one’s own national community) and futurity (concern about future generations) must be among its systematically constitutive elements. Its internal logic would have to provide a promising global civil-society prospect—without double standards on addressees and the time horizon. However, these are peripheral aspects in the mainstream public

interest discourse, which has attracted criticism from various sides (Görres-Gesellschaft 1986: 858 ff.; Sommer and Westphalen 1999: 370).²³ Although the ‘bundling concept’ of public interest (Ossenbühl 1994) now embraces both environmental protection and the interests of coming generations, these issues are not really addressed at the *cosmopolitan* level. The postulate that realization of the public interest in the 20th century “is no longer a matter of government and governments alone but a *task of the world population* as a whole and of *supranational activities and organizations*” is largely alien to the prevailing understanding of public interest in the 21st century, too.²⁴ Adequate acceptance of the sustainability idea remains a major challenge for the covert, internal, functional logic of universally garnished particularism associated with the public interest concept. This is the case for the majority of Western industrial countries, and still more so for developing countries, which generally have a much more limited concept of ‘public interest community’, where close local, family, or religious relations set the limits to the *sensus communis*. It has therefore rightly been asked: “will the ties of kinship or loyalty to village tribe, community, or region permit an awareness of larger configuration of ‘public’? ... The answer to such questions will determine whether the term *public interest* has a universal applicability or whether it will remain a feature of Western jurisprudence and political thought” (Herring 1972: 174).

Even in affluent ‘Western’ societies, the “conviction that the public interest principle cannot be universalized is ... clearly general,” as soon as it is a question of who is to benefit from specific public interest policies (Neidhardt 2002: 172). From a global point of view, the exclusion question is likely to become still more urgent, not least of all because the moral impetus for universalization is much weaker owing to the operation of other cultural norms. Moreover, it is opposed by sound political realism. Why should the poor and poorest nations worry about the public interest of, for instance, OECD industrial countries if the latter are not even prepared to obey the

23 Attention is drawn, for example to “issues of survival that are now becoming more and more urgent, like peace and environmental protection”; “... in view of worldwide destruction, the survival of all depends on public interest in this sense of the term, also of those who have hitherto been largely spared ecological changes ...” (Drechsler, Hilligen and Neumann 1995: 332).

24 The Stoics’ public interest concept, in contrast, was cosmopolitan in nature, i.e., it included all human beings, and for scholasticism the public interest was “what is good for all creatures” (Meyers Kleines Lexikon 1987: 158).

principle of give and take? Besides, many developing countries are more interested in catching up than in sustainable development.

Underlying the sustainability concept is a universal system concept. The point of reference is the whole of humanity without regard for person, origin, or affiliation. The concern for future generations issuing from the ‘futuraity aspect’ goes far beyond the ‘grandchild perspective’ of the public interest concept.

Compared with the cosmopolitanism of sustainability, the public interest concept is almost provincial. Its spatial reference—the community—is generally the nation state, whose internal organization is based on the construct of the ‘alien,’ the non-citizen (Albrow 1998: 271). And even within the nation state double standards apply; for example where certain groups of the population are excluded from the *sensus communis* (Neidhardt 2002: 171-71).

One function of the sustainability concept could be to strengthen a political and social development dynamic which is already in motion, gaining acceptance and establishing new institutional arrangements for inevitable redistribution policies. This would prove as well to be a radical criticism of the anachronistic interpretation of the public interest concept. For in the long term the effects of the public interest concept will quite certainly bring harm to the public interest as such—through diverse feedback mechanisms of an ecological, economic, and political nature, as long substantiated by empirical and scientific evidence (cf. WBGU 2001, 2003; IPCC 2001b).

However, in a world that, *despite* globalization, continues to be dominated by national interests, and in the growing competition between systems *on account of* globalization, it would be politically unwise to play the sustainability idea off against the achievements of national welfare systems, which are regarded as constitutive elements of democratic policy and its legitimation. The public interest concept would have the function of integrating the strong demands for self-restriction and re-distribution derived from the worldwide equity ideal of the sustainability concept into democratic legitimation processes that still operate largely at the national level: of containing them and making them more realistic.²⁵

25 “Although it certainly makes sense to describe a lifestyle directed towards sustainability as an alternative form of a gratifying life ...” (Renn 2001: 95-96), in democratic societies it is inevitable that majorities for this vision have to be sought in nationally organized political contexts: a genuine zero-growth strategy as a political electoral program “would be po-

For a long time to come, the emerging global governance institutions and regimes are unlikely to be an adequate substitute in generating *and* legitimating majority decisions on key policy issues with a strongly re-distributive impact—for reasons similar or even more complex to those advanced in the discussion on the democratic legitimation of European policy in the framework of the European Union (cf. Kielmansegg 1996: 55 ff.; Scharpf 1999: 16 ff., 167-168).

As we have seen, not only positive relations but also strong tensions exist between the sustainability and public interest concepts. They result from different referential bases, which in simplified form can be described as national versus global, present versus future: the public interest concept emphasizes the Here and Now, the sustainability concept the There and Later. This is a particular problem in designing policy strategy. It is argued that there is no way to avoid giving equal weight to both concepts in the politico-social discourse. In an increasingly boundless world that is increasingly interdependent in questions of survival, a concept for the development of society needs to be elaborated, in the sense of a visionary pragmatism, that promises a decent life for all even in the distant future (cf. also Jonas 1984).

*Conclusion: No Public Interest without Sustainability, no Sustainability without Public Interest*²⁶

Goal conflicts between the two ideas can in principle occur at all levels of action (local, national, global) and at any time. As governments' duty to take formative action and their responsibility for the consequences become less and less limited in space and time, the potential for conflict tends to grow, especially in the industrial countries. In the conventional understanding of the public interest, the more faithfully and devotedly policies are geared to

litical suicide in Europe" (von Weizsäcker 2001: 23). The basic principles and arrangements laid down by the German constitution for finding a balance in complicated conflicts of interest or values—for example, the precept of a balance of interests, the ban on excessive and inadequate measures (cf. Schuppert 2002)—could be guiding principles for a discourse on 'sustainability and the public interest.' Given the not infrequent abuse of discourses to legitimate inactivity on an issue, the relevance for practice cannot be emphasized strongly enough. In this regard D. C. Esty (2001: 75) is very apodictic: "The time for grand vision and flowery rhetoric has passed. The challenges ahead require sharper focus, real commitment, and concrete action."

26 Variation of a postulate by W. Sachs (2002: 28): "No equity ... without ecology ... no ecology without equity"; see also Sachs, Loske and Linz 1998: VIII.

the principle of sustainability, the more seriously are they seen to threaten the (national) public interest. This is evident in the so-called global environmental challenges like climate change and how governments react to them.

Only meager progress has been made in international climate policy despite considerable input in negotiations and research. The countries that have substantially lowered their emissions of greenhouse gases by policy measures can be counted on one hand.²⁷ The majority of climate researchers expect global warming to have disastrous effects, especially for the population of poorer countries.²⁸ The main offenders, the industrial member countries of the OECD, have less dramatic repercussions to fear; their economic and technical capacities give them greater scope for limiting damage. Not only their presumed lesser vulnerability but also the anticipated costs and socioeconomic consequences have so far hindered a climate policy which would take more appropriate account of the problem and those who cause it. For, despite the interest-motivated dramatization of the economic impact of a strict policy to reduce greenhouse gases, there can be no doubt that high costs would generate considerable short and medium-term distribution effects at variance with public interest goals. And if measures to protect the

27 According to the 3rd report of the Intergovernmental Panel of Climate Change published in spring 2001 ('Climate Change 2001'), the mean global temperature will rise by up to six degrees Celsius in this century alone, if the course of climate policy is not corrected worldwide. The main cause of global warming is seen in the enrichment of the atmosphere with greenhouse gases through the growing consumption of fossil fuels and deforestation. Between 1990 and 2000 alone, the OECD countries, with an average economic growth rate of 16.5 percent, increased their CO₂ emissions by almost 15 percent. The Kyoto Protocol adopted in the context of the UN Climate Convention (1992) in Kyoto in 1997 (but not yet in force) requires the industrial countries, which bear the main responsibility for climate warming, to reduce their emissions of greenhouse gases by 5.2 percent below the 1990 level by 2010. According to a recent study, from 1990 to 2003 total global CO₂ emissions increased by almost 20 percent; in the same period developing ('non-annex-I') countries show a steep rise in CO₂ emissions of 58 percent—they now account for about 45 percent of global CO₂ emissions (*DIW-Wochenbericht*, No. 37/2004, pp. 526-527).

28 A number of industrial countries are among those that stand to gain from climate change, whereas most developing countries will be among the losers. Within Europe, southern countries are likely to be worse affected than the northern nations, and poor peripheral regions will suffer more than well-off regions. For the poorest countries like Bangladesh, according to calculations by Münchener Rückversicherung, the economic damage caused by climate change could amount to 20 percent and more of the national product (*Wirtschaftswoche*, No. 29, 12 July 2001, p. 25). As a whole, the negative effects will chiefly be borne by the countries and population groups that have contributed least to the emission of greenhouse gases and thus to creating the problem (cf. the article by H. E. Ott and B. Brouns in *Das Parlament*, No. 46, 9 Nov. 2001, p. 3; for a comprehensive treatment of the issue "Consequences of Climate Change," cf. IPCC 2001b; also Kluger and Lemonick 2001). For estimates about costs of climate change in Germany, see *DIW-Wochenbericht*, Vol. 72, No. 12-13/2005, pp. 209-215.

climate are governed by a concept of global ecological distributive equity like the ‘environmental space concept’—which lays down a worldwide, uniform, per capita right to use (and stress) natural resources—the industrial countries would have to expect far-reaching domestic changes in socioeconomic distribution patterns owing to the reductions imposed. Maintenance of the Western resource-intensive lifestyle would appear impossible (DIW, WI and WZB 2000: 371).

Despite the economic and societal consequences of an equality-based equity principle, with their almost paralyzing effect on political sustainability initiatives, there is no convincing moral meta-reason why a distribution rule deviating from the per-capita principle (and thus sanctioning inequality) should apply with regard to essential global common goods (like the atmosphere). Political realism and not moral dignity is behind arguments in favor of unequal distribution.²⁹ Nor is it a matter of solitary sacrifices on the part of the advanced industrial countries but of the consequences of their ecological imperialism.

However, especially in the industrial countries, subordinating public interest policy to a radical sustainability idea would, at least in the short and medium term, bring growing internal conflict. This would be caused, among other things, by curbing the scope for prosperity-oriented public interest policy in conjunction with the prospect of a gigantic re-distribution program in favor of a geographically, temporally, or ‘emotionally’ distant environment, ‘co-world,’ and posterity. Even weak sustainability policies show clearly that prospective losses in welfare meet with heavy opposition. This is the case even in some of the wealthiest countries whose level of prosperity is based in not inconsiderable measure on the global externalization of the ecological and social follow-up costs of their way of pursuing economic affairs. The present American administration, for example, is among the most adamant opponents of a coordinated global climate policy. It consistently rejects international agreements as being contrary to the American ‘public interest’ (cf. Brown 2002). In Germany, once a pioneer in environmental matters, the

29 On the various arguments that have been advanced in the discussion about political strategies for action in favor of an unequal distribution of global resources among the countries of this world (like safeguarding existing development paths, different basic climatic/geographical conditions, the danger of bureaucratized quota systems, etc.); cf. Knaus and Renn (1998: 68 ff.); Helm and Simonis (2001: 215-217). For a general discussion, see Shue (1993).

so-called eco-tax has, since its internationally belated introduction in 1999, been a source of constant annoyance for a considerable number of people—blown up out of all proportion by opposition parties, industrial and motoring associations—despite far-reaching exemptions and compensations for particular industries and frequent drivers. Critics have decried the economic incompatibility of the tax (damage to international competitiveness due to higher energy prices and the consequent risk of a fall in the general level of prosperity in the country) and its social inequity (higher petrol prices for frequent car drivers and motorists in rural areas). Leaving aside the ecological goals (reducing private transport levels, promoting environmentally more efficient mobility, etc.), the principal socioeconomic goal—actually a public-interest objective—of creating jobs by using revenues to lower charges on labor has been pushed into the background in the public discussion. The problems that occur even in a wealthy country like Germany, with a comparatively high level of environmental awareness, when a modest contribution to sustainability is demanded—and one that is not even lost to the country but reallocated for the benefit of the nation as a whole—give some idea of how high the obstacles would be for attempts to introduce the more demanding climate policy measures that would be necessary from an ecological point of view, not to mention transfer payments to countries using a low proportion of common ecological goods. Moreover, an international comparison of environmental policies shows that even a consistent ‘ecological modernization policy’ in many industrial countries would at present overburden the environmental policy capacities at hand, since the necessary cognitive-emotional, technological-economic, and sociopolitical/institutional capacities are not yet available (Weidner and Jänicke 2002).

These few examples alone demonstrate that the public interest idea can be mobilized without contradiction in opposition to sustainability goals recognized as necessary and legitimate. The more restricted temporal and spatial perspective of the public interest idea benefits from the fact that charity begins at home. The (at least plausible) positive long-term effects of initially costly sustainability measures on one's own well-being are apparently difficult to comprehend cognitively and emotionally, and new groups of winners and losers would soon make their appearance. In these circumstances it is little wonder that, in the public debate on the demands of sustainable development the more evident public interest concerns are played off

against a supposedly cosmopolitan utopia of ‘pursuing world happiness into the blue beyond.’

Nevertheless, keeping in mind the most general questions that, according to Martin Albrow (1998: 267), “the idea of the State had to answer from the outset: Whose public interest is meant? How far does it go?”³⁰ The answer with regard to the behavior of rich towards poor societies is clear³¹: in essence, the sense of community is limited, first, to those who live within an organic historico-cultural community and, second, to the foreseeable future. In modern conceptual terms, the prevailing understanding of public interest corresponds to the position taken by an etatist communitarianism, not a liberal universalism (cf. Ballestrem 2001: 8). However, the underlying dichotomies of Here and There, Now and Later have in fact long since been cancelled by global ecological challenges. Advancing globalization is progressively eliminating the distinctions in other dimensions, too (economic, political, social, cultural): “The image of concentric circles—the farther away a person is from us the smaller is our obligation towards him—appears no longer to apply” (Ballestrem 2001: 7).

2.3 The Relationship with Equity

The concept of ‘ecological modernization’ (EM) takes up basic mechanisms of modern capitalist societies—an interest in expansion, efficiency, innovation, and profits—which it seeks to instrumentalize to protect the environment and natural resources. Intragenerational and intergenerational equity play a peripheral role; such issues are regarded more in *realpolitik* terms as limiting factors that have to be taken into account by astute environmental policy in the globalization age rather than as primary normative goals. Global environmental problems play an important role, but they are not *per se* at the top of the agenda. Priority is usually given to those problems that lead to the most detrimental effects at the national level or if their solution corresponds in other respects with the national interest.

30 The two other questions that need to be asked are: “Who guarantees it? And How?” (Albrow (1998: 267).

31 This is by and large the case: a few countries like the Netherlands, Sweden, and until recently Denmark have shown that social and economic self-interest and global ecological and other goals can be linked in a socially acceptable manner. Incidentally, these countries do well in overall comparison with other countries in the dimensions environmental policy, societal integration capacity, social peace, and level of welfare (cf. Jänicke and Weidner 1997).

The equity issue constitutes the most crucial difference between EM and SD. I agree with Langhelle's results of an analysis of the Brundtland Report 'Our Common Future' (WCED 1987) that the satisfaction of human needs, in particular the essential needs of the world's poor, "must in light of both the definition and the first key concept be seen as the primary objective of development.... The qualification that this development must also be sustainable is a constraint placed on this goal, meaning that each generation is permitted to pursue its interests only in ways that do not undermine the ability of future generations to meet their own needs. ... [S]ocial justice—understood as need satisfaction—is in this perspective *at the core* of sustainable development ... [It] is *the* primary goal of sustainable development" (Langhelle 2000: 307). Furthermore, and also in contrast to the concept of EM, sustainable development introduces the *global* perspective on ecological, developmental, and distributional problems within the existing generation (intragenerational justice) as well as between generations (intergenerational justice). A fair allocation of global goods, of the costs for environmental policy measures and the costs of coping with the social and economic consequences of un-avoided environmental problems is given overriding priority. Due to the global perspective of the SD concept, global environmental problems enjoy top priority and, among these, the issue of *climate change* ranks first. Finally, the SD concept explicitly recognizes that, on the one hand, the legitimate developmental aspirations of developing countries cannot be met if they follow the growth path taken by industrialized countries, and that, on the other hand, industrialized countries must reduce sharply the stress they impose on the ecological system in order to allow for the economic growth necessary to satisfy the need of the poorer countries. The SD concept could be characterized by the well-know slogan, "Think globally, act locally"; the EM (and also the public interest) concept, in turn, is broadly reflected in the slogan, "Think locally/nationally, act globally."

The comparison of the central characteristics of the SD and EM concepts shows clearly that the most crucial difference of both concepts is related to the issue of equity/social justice. From this follows that the need for *redistributive* policies on a global scale is inherent to the SD concept. Although equity concerns are also central to the concept of public interest, they are confined to a specific community, usually within the borders of a region or country. Because the public interest concept lacks a global perspective and has a rather narrow understanding of 'futuraity', it has much more in com-

mon with the EM concept than with SD. In section 4 of this paper, I analyze whether these different notions of equity matter in environmental policies and Local Agenda 21 activities in Germany. Beforehand an overview of the basic characteristics and development of German SD and environmental policy is given.

3. Environmental Policy and Sustainable Development Policy in Germany

Although Germany was not among the pioneers in establishing a modern institutionalized environmental policy in the 1960s it became a close and highly effective follower of the then leading forerunners (in particular the U.S., Sweden, and Japan; cf. Schreurs 2002, Jänicke and Weidner 1997) and only a little later became a pioneer in important areas, stimulating progressive developments in other countries (Weidner 2002c). With respect to the concept of ‘ecological modernization’—developed in theoretical terms in the early 1980s—Germany was the absolute forerunner in both conceptualization and institutionalization and strongly influenced other countries with its approach. Since the 1990s, Germany has been among the group of pioneers in climate protection policy and remained one of the driving forces in international negotiations. However, in Sustainable Development (SD) as well as Local Agenda 21 (LA 21) activities the country was among the real laggards although it has been catching up quickly with the leaders in these areas since the late 1990s.

3.1 Environmental Policy

3.1.1 General Overview

For over 30 years now, Germany has had a systematic modern environmental policy, which is both institutionally and legally well grounded within the general political system. A variety of factors led to some progressive developments. These factors included a heightened environmental consciousness in society, some spectacular and widespread pollution events (especially ‘forest dieback’), and growing interest within the business sector in the expanding environmental markets. Other factors included the challenges in the political arena by the well-organized ecological movement, and

the founding of green parties at all levels (local to national). The measures taken and their outcome have assured Germany's temporarily high standing in the field of progressive environmental policy (Weidner 2002c, Mez 1995).

The onset of forward-looking clean air policy at the national level accelerated the West German government's international activities, and it also set the pace, more and more frequently, at the level of the EC. These activities were not only rational from a global perspective, but also coincided with the country's own interest in spurring internationally coordinated measures against acid rain and long-range currents of air pollutants, since German industry could offer the necessary environmental technology. The concept of climate protection, especially the ambitious goal of reducing CO₂ emissions by 25 percent of 1990 levels by 2005 has supported a new ecological orientation in the field of energy policy, emphasizing the necessity of a long-term perspective. In November 1994, an amendment to the Constitution (Art. 20a GG) made environmental protection a 'state goal' (*Staatsziel*).

The new challenges to environmental policy posed by the economic recession, which began after the unification of the two German states, put a brake on the more progressive developments. However, a massive rollback in environmental policy did not take place and would be hard to achieve because not only has a substantial ecological consciousness become part of the German value system but also did a broad-based institutionalization of environmental policy take place, and competitive 'green' commercial and industrial sectors developed (Jänicke and Weidner 1997; Weidner 1997). The stability in environmental politics is consistent with the general hypothesis that the institutional conditions in German politics make a fundamental change of strategy a long drawn-out process. As a rule, major changes require broad political and social consensus, typically gained through a complicated and time-consuming process. The roots of this approach lie in the German neocorporatist pattern of problem-solving and its associated institutional fabric. This fabric includes the specific form of German federalism, namely the requirement for the rule of law with its entailing constitutional opportunities to scrutinize fundamental political decisions, and the proportional voting system which seldom leads to clear-cut political majorities (cf. Schmidt 1990).

The old neocorporatist mode of cooperation of the postwar period found among state, business associations, and unions (the 'iron triangle') has

gradually developed in the direction of a network (the 'green rectangle') in which organizations specifically representing environmental concerns are now also able to participate in important environment-related political decisions. More and more parts of the business sector have developed a keen interest in stringent environmental regulations, creating new markets and expanding those already established. For a long time, the so-called eco-industry has enjoyed above-average growth rates and reached a leading position in the world market.

The victory of the Social Democrats and the Greens in the national elections of fall 1998, in which both parties had emphasized the 'ecological modernization' of German society and industry in their campaigns, demonstrates that a majority of the German population supported a progressive environmental policy, even when the globalization debate was at its height.

Both parties' election manifestos stressed a strong commitment to a strategy of 'ecological modernization' of economy and society to promote innovation and employment. In addition, both favored, in principle, an ecological tax reform. In simple terms, the objective of this reform was to shift the tax burden from labor to pollution. Green Party member Jürgen Trittin became the new Minister of the Environment. Large parts of the population put high hopes in the new government and the 'green' minister, not only with respect to a consolidation of social welfare and reduced unemployment, but also with regard to environmental policy. In particular, they hoped for a more active policy against 'global environmental challenges,' especially global warming.

As early as April 1999, the first stage of the *ecological tax reform*, which attempts to reduce fossil-fuel consumption by levying higher taxes on energy (including gasoline), was implemented.³² Due to an imprudent political strategy pursued by the Ministry of the Environment (and representatives of the Green Party), a broad and polemic press campaign against the tax reform was launched. The tax reform met massive opposition from the business sector, and large parts of the public also protested against it because, in view of rising energy prices, they feared adverse social and economic consequences. The 'eco-tax' is thought to have a number of flaws, including the

32 The ecological tax reform raised existing taxes on gasoline by € 0.03 per liter each year until 2003. Eco-taxes were similarly applied to fuel oil, natural gas and liquid petroleum gas. A levy on electricity was also introduced.

facts that tax rates for industries are much lower than those for the residential sector, that some industries are even exempted, and that the tax is not based on the carbon content of fuels.³³ In 1999, a total of € 9.5 billion were levied through the eco-tax. According to the stepwise increase in tax rates, the amount for 2003 was € 16.6 billion. It is estimated that the revenue raised by the ecological tax reform will increase to about € 19 billion by 2008. The eco-tax revenue is used primarily to cut monthly social security contributions from employers and employees in order to lower labor costs and encourage job creation.³⁴ It is also meant to act as an incentive to efficiency-related and thus emission-reducing measures (BMU 2002a: 60 ff.). These potential effects are usually called the ‘double dividend’ of the eco-tax. As a result of nationwide protests against socially unfair effects of high fuel prices, in 2000 the government was forced to introduce nonrecurring compensation measures for those hit hardest by the eco-tax (especially commuters and low-income households).

Concerning general environmental and nature protection policy, the new government has—with few exceptions (see Rat von Sachverständigen für Umweltfragen, in the following: SRU, 2000)—neither achieved anything worth mentioning from an international comparative view nor created innovative programs. In spite of repeated announcements since 1999, a comprehensive ‘national environmental plan,’ as has been set up in many other countries, was established only as late as April 2002. Also repeatedly announced since 1999 was the establishment of an independent national Council for Sustainable Development, but only in April 2001 such a body was finally established.

In terms of *energy policy*, however, the new government set ambitious goals and began implementing appropriate measures to reach them (see Mez 2004)—for example, by raising the share of renewable energy³⁵ in power generation to 12.5 percent (from 4.6 percent in 1998 and 7.9 percent in

33 Those sectors of the economy that are exposed most to international competition (manufacturing, agriculture, forestry) are entitled to eco-tax rebates of up to 80 percent; from 2003 on, these rebates are gradually reduced.

34 A small part of the revenue is reserved for the promotion of renewable energy projects and energy-efficient buildings (€ 150 million in 2001; € 190 million in 2002, € 200 million in 2003; these subsidies will be gradually raised to € 230 million in 2006). Furthermore, energy-efficient combined heat and power generation (co-generation) is exempted from electricity and mineral oil taxes.

35 For comprehensive information on renewable energy and related technology, see <<http://www.energy-germany.de>>

2003) by 2010, and to 20 percent by 2020.³⁶ Already, Germany is the world's leading nation (far ahead of the United States) in wind-energy generation (BMU 2003). In view of the energy policy goals, it was conceivable that at least the objective of the Kyoto Protocol of 1997 to reduce greenhouse-gas emissions could be achieved. Compared to 1990, Germany succeeded in lowering emissions by 19 percent in 2002 (supported by industrial shut-downs in the former GDR).³⁷ However, the National Allocation Plan (CO₂), established in April 2004 in connection with the emissions trading system, makes it very difficult to reach the reduction goal, because the industry (supported by the Minister of Economic Affairs) won the bargaining process. The Ministry of the Environment wanted to fix a reduction goal of 28 million tons from 1998 to 2012 but had to concede to a much lower goal of 13 million tons. On the one hand, this means that reduction efforts concerning households and traffic must be increased immensely. On the other hand, the burden of CO₂ reduction policy is likely to be shifted from the producers to the consumers (see *DIW-Wochenbericht*, No. 10/2004: 121-128). However, among the western industrialized countries that have achieved any CO₂ reductions, Germany ranks first. In international climate policy, Germany continued to play an active and progressive part.

The present German government has now been in office for about six years. This is a short time frame for a well-founded evaluation of its environmental performance (cf. Mez 2003; SRU 2004). Therefore, the critical judgment given here must be read with caution. In addition, it is necessary to consider the particular restrictions with which the environmental policy of the 'red-green' government has had to cope. Although public opinion polls indicate that Germans still think environmental issues are very important, other issues (especially unemployment and social security) have gained higher priority during recent years. Business organizations have used the 'globalization debate' in trying to fend off stricter environmental regulations, although so far there have been no valid indications that globalization has

36 These concrete goals are fixed in the 2004 amendment to the Renewable Energy Act. The use of renewable energy contributed to a CO₂ reduction of 52.6 million tons in 2003 (*Umwelt*, BMU 5/2004: 262). The following types of renewable energy made up the total 7.9 percent share of renewable energy in gross electricity consumption in 2003: waterpower 3.5 percent, biomass 1.2 percent, photovoltaic/solar power 0.1 percent, wind power 3.1 percent (*Umwelt*, BMU 4/2004: 192).

37 Energy-related CO₂ emissions decreased by 15 percent in 2003 (compared to 1990); when taking into account seasonal changes of temperature, the reduction amounts to 17 percent (*DIW-Wochenbericht*, No. 10/2004: 121).

brought disadvantages to countries with a progressive environmental policy or triggered a race to pollution havens (i.e., relocation of production to countries with lower environmental standards) (Weidner and Jänicke 2002). With few exceptions,³⁸ Chancellor Schröder supports environmental policy only halfheartedly and tends to side with the interests of large industries or trade unions (Weidner 2002c). Last but not least, the previous successes of environmental policy seem to have given an ‘all-clear signal,’ so that many Germans feel existing regulations are sufficient to further improve environmental quality. The absence of recent environmental catastrophes (forest dieback, smog, and so on) has reinforced this feeling of safety. However, the catastrophic flash flooding of some regions in the summer of 2002 have widely restimulated discussions on the need for stricter and more comprehensive environmental policy (and, again, demonstrated the actual power of solidarity and equity values *within* Germany). They obviously have also contributed to the red-green coalition’s re-election in September 2002; the people attributed higher environmental competencies to the government than to the opposition parties. Especially the Green Party gained votes.

Overall, compared to the last term of the preceding conservative-liberal government, the environmental policy of the red-green coalition has been clearly more dynamic. When focusing on energy- and climate-related areas (phase-out of nuclear energy, promotion of renewable energy, introduction of eco-taxes), a significant policy change has taken place. The German government, again, became a driving force in international environmental policy negotiations, which was particularly visible at the World Summit on Sustainable Development in Johannesburg in August/September 2002.³⁹ And, at least, Germany caught up with many other countries in establishing a national sustainability strategy in April 2002.

38 Chancellor Schröder was decisive in launching the global initiative on renewable energies during the Johannesburg Summit on Sustainable Development in 2002. He pledged to allocate € 1 billion for the promotion of renewable energy and energy efficiency in developing countries for the timeframe 2003-2007. At the ‘Renewables 2004’ conference in Bonn, the German government announced its decision to make an additional € 500 million available (2005-2010) for special loans. The conference was attended by about 130 ministers and more than 3,000 participants from 154 countries. The main goal of the conference was to support developing countries in switching to renewable energies, placing equal emphasis on both climate protection and development opportunities. For the outcomes of the conference, see <<http://www.renewables2004.de/en/2004/outcome.asp>>.

39 Especially the global initiative on renewable energies goes back to an effort of the German government. The first international conference on the issue (‘Renewables 2004’) took place in Bonn in June 2004 (cf. <<http://www.renewables2004.de>>).

3.1.2 Climate Change and Energy Policy

Germany's strengths in air pollution control policy, acquired at an early stage, positively affected its commitment in climate policy matters. In the early 1990s Germany belonged to the leading countries taking up the global climate challenge (cf. Schreurs 2002; Cavender-Bares, Jäger and Ell 2001; Grundmann 1999). A wave of governmental activities was raised by a comprehensive scientific investigation on the issue of climate change and the anthropogenic greenhouse effect undertaken by the German Physical Society in 1986. This report was soon followed by a widely debated cover story of the weekly political magazine, *Der Spiegel*, that pointed at the potentially large-scale destructive effects of an increasing global warming for the Earth, in general, and for Germany, in particular (especially flooding of certain regions and big cities). In March 1987 chancellor Kohl declared that the climate issue represented the most important environmental problem. On the national level the Committee for the Environment, Nature Conservation, and Nuclear Safety of the German Bundestag agreed to establish an Enquete Commission on Preventive Measures to Protect the Earth's Atmosphere (*Enquête-Kommission 'Vorsorge zum Schutz der Erdatmosphäre'*), with the mandate to study the ozone problem as well as climate change and to make proposals for action. In its first report of 1989 the Commission recommended strong national and international efforts to reduce drastically climate-relevant emissions. The Commission recommended a 30 percent reduction of 1987 levels of CO₂ and methane emissions by 2005, and an 80 percent reduction by 2050 (German Bundestag 1991) as well as a fundamental reform of energy policy. In June 1990 the federal government adopted a reduction target for energy-related CO₂ emissions of 25-30 percent of 1987 levels by 2005. This target was changed later on to a 25 percent reduction goal based on the emission level of 1990. Furthermore, in June 1990 an inter-ministerial working group (IMA) 'CO₂ reduction' was established, which developed a program proposing a broad range of measures to reach the reduction goal (Beuermann and Jäger 1996; Beuermann 2000). This program led to a variety of legal and administrative activities based primarily on energy- and

technology-related measures (e.g., the Electricity Feed-In Law of 1990, succeeded by the Renewable Energies Sources Act, enacted in April 2000⁴⁰).

Although, due to the economic downturn and increasing unemployment rates, climate policy lost some of its momentum during the 1990s, it never suffered as much from the economic recession as other environmental policy areas. Chancellor Kohl and various federal environmental ministers (of all governments) often played an active and sometimes decisive role in getting progressive international climate protection policies and agreements on the right track (Jänicke and Weidner 1997). This holds also true for the present Chancellor Schröder (for example, consider his commitment at the World Summit on Sustainable Development in Johannesburg, 2002), although in other environmental policy areas he was clearly biased in favor of economic interests (see, for instance, the EU automobile scrap directive or the eco-tax). The current Minister of the Environment, Jürgen Trittin, recently announced a German motion for achieving an EU commitment to reduce its greenhouse gases until 2020 by 30 percent compared to 1990 levels. If the EU agrees, Germany would even strive for a reduction of 40 percent in this period (*Umwelt*, BMU 1/2003: 33).

In sharp contrast to some other industrial countries, especially the so-called umbrella countries, there was no fundamental opposition against climate policy as such, either by influential interest groups and political parties or by other actor groups. This broad consensus on the necessity of strict and internationally accorded global climate protection measures is also reflected in the unanimous acceptance of the bill concerning ratification of the Kyoto Protocol by the German parliament and the upper house (*Bundesrat*) in March 2002 and April 2002, respectively. Disputes about climate policy mostly center around nuclear phase-out policy, questions of suitability, rationality or feasibility of instruments, reasonable time frames for implementation, distortion of competition among different 'energy lines,' and, probably most importantly, the argument that Germany's industry would not be internationally competitive because of higher production costs resulting from the extremely demanding environmental standards and Germany's position as a forerunner. Nevertheless, a group of German industrial associa-

40 The Renewable Energies Sources Act (*Erneuerbare-Energien-Gesetz, EEG*) was amended in 2004 in order to avoid placing overly high burdens on energy-intensive industrial enterprises.

tions and individual firms has not only renewed the formerly voluntary commitment. Now, an agreement between the government and the German industry was entered in November 2002 to reduce CO₂ emissions by 20 percent from 1996 to 2005, with an additional pledge to achieve even higher reduction rates (28 percent by 2005, compared to 1990 levels). Furthermore, for all six greenhouse gases listed in the Kyoto Protocol, specific emissions are to be reduced by 35 percent until 2012, based on 1990 levels. The achievements are monitored by an independent institute. Worldwide there is no commitment of business groups to climate protection comparable to that of German industry.⁴¹ The scientific community, too, did not contest significantly the theory that global warming is mainly a result of the combustion of fossil fuels and that there will be dramatic impacts on mankind and nature unless global warming is stopped. And, as surveys show, a majority of the population considers global warming the most challenging environmental issue.

From the very beginning, climate protection policy was given high priority by the red-green government that came into power in fall 1998 (see BMU 2002a: 38 ff.; Mez 2003). In the coalition contract (*Koalitionsvereinbarung*), the parties agreed on a 25 percent reduction target for CO₂ emissions, and in October 2000, a comprehensive national climate protection program was launched, envisaging, *inter alia*, a sharp increase in renewable energy, heat and power (co-)generation, and a significant increase in energy productivity. This program is based on the 5th report of the aforementioned interministerial committee (*Interministerielle Arbeitsgruppe—IMA*), ‘CO₂ Reduction,’ chaired by the Federal Ministry of the Environment. In contrast to climate policy programs of the former conservative-liberal government, the program of 2000 lists concrete CO₂ reduction targets for various sectors (e.g., households,

41 However, when negotiating the conditions of the German National Allocation Plan for the European emissions trading system, which started in 2005, industry and energy companies succeeded to fix for their sector a reduction target of only 10 million tons by 2012. The total allowance of CO₂ emissions for both sectors was fixed at 503 million tons per year for 2005-2007, and 495 million tons per year for the years 2008 to 2012. (cf. BMU, ‘Balance halten: Umweltpolitik für ein zukunftsfähiges und lebenswertes Deutschland,’ Berlin, September 2004, p. 21). Compared to their voluntary commitment this is a much weaker target (cf. <<http://www.germanwatch.org>>; *DIW-Wochenbericht*, No. 31/2004: 445). Consequently, in order to meet the Kyoto commitment, larger reductions than planned must be achieved in transport and the private household sector (space heating, hot water supply, electrical appliances). From this follows that the burden of private households to contribute to greenhouse gases reduction has been increased in favor of big industry. The emission trading system is regulated by the Emissions Trading of Greenhouse Gases Act (*Treibhausgas-Emissionshandelsgesetz—TEHG*) of March 2004.

industry, transport, power supply). Another outstanding energy policy measure is the (highly controversial) electricity ‘feed-in’ act adopted in 1999, later on renamed ‘Renewable Energies Sources Act.’ It is designed to support the development of renewable energy by ensuring guaranteed prices to be paid by power companies to producers of electricity from renewable sources. Further measures include the ‘100,000 Roofs Solar Power Program’ (running from 1999 to 2004), based on government subsidies. There are also several measures to cut energy consumption in private households, including stricter construction regulations and tax breaks for the modernization of older buildings; investments in public transportation; and the promotion of more efficient cars. Furthermore, the federal government committed itself to reduce CO₂ emissions in its own spheres of competence by 25 percent by 2005 and 30 percent by 2010 (based on 1990 levels). There are also manifold climate protection projects running at state and local levels, often in relation to Local Agenda 21 activities (cf. www.iclei.org; www.klimabuendnis.org).

The highly contested so-called eco-tax legislation was enacted in 1999. It provided for annual increases in taxes on mineral oil, heating oil, natural gas and electricity in five steps, ending in 2003. The basic idea of the eco-tax is to make labor less expensive while raising prices for non-renewable energy consumption, to support a shift to ‘environment-friendly’ technologies (e.g., with low or zero CO₂ emissions), and to create new jobs (BMU 2002a: 60 ff.).

Germany made remarkable progress in the reduction of greenhouse gases. It obviously belongs to the world’s leading countries in climate policy performance. This even holds true when disregarding any ‘wall-fall profits’ (i.e., CO₂ reductions in the course of the de-industrialization process in the five new states of the former GDR). Until recently—with the beginning of 2000—a trend of declining CO₂ emissions started to show in the transport sector, indicating that the eco-tax took effect. But in spite of these favorable developments it is generally deemed unlikely that the 25 percent reduction goal can be met in 2005. This might explain why for quite some time this goal has not been mentioned by government representatives in official statements or publications. However, chances are that the ‘European target’ for Germany (21 percent reduction of greenhouse gases by 2008/2012, com-

pared to 1990 levels) might be within reach if the government takes additional energy policy efforts (*DIW-Wochenbericht*, 8/2003, p. 136).⁴²

All in all, Germany has been among the forerunners in national and international climate protection policy, and—in spite of the increasing brake-man’s attitude of the energy-intensive industries—the country has secured, if not strengthened, its leading position. Germany’s strength in this policy area may be explained, in part, by a ‘positive path dependency’, i.e., it is the result of Germany’s generally excellent performance in air pollution control (stationary and mobile sources) over many years and related energy policies that received their main impulses from wide-spread visible problems leading to broad public debates and deep conflicts some decades ago, such as forest die-back (*Waldsterben*) and various smog episodes in larger cities and in Germany’s largest industrial region, the Ruhr Valley (see Weidner 2002c: 177 ff.).

3.2 Ecological Modernization (EM) as Conceived by the Government

The concept of ecological modernization (in the following: EM), as used by the German government, is based on the pragmatic, ‘bureaucratic’ definition of EM, which primarily conceptualizes it as an economic-technical transformation towards an *ecologically* sound society, driven by technological change and innovation in all sectors of society, and supported by a balanced restructuring or downscaling of environmentally problematic sectors (like agriculture and open-cast coal mining). At the same time, the concept aims at an improvement of ecological and economic efficiency and emphasizes the importance of economic and market dynamics as well as consensus-oriented policies in ecological reform. The idea that EM should, in balance, be a win-win-strategy for all social groups—saving the environment, leading to advantages in global competition and creating new jobs—is the basis of the government’s programs (see BMU 2002a).

EM is a key element of the red-green government’s program and one of the cornerstones of the coalition contract of 1998. Both parties—the Social Democrats and the Greens—have been strong proponents of EM for many years. The EM concept was introduced in the early 1980s by the political

42 Germany’s commitment equals about three quarters of the amount of emission reductions pledged by the European Union in the Kyoto Protocol.

scientist (and then member of the Berlin parliament) Martin Jänicke as an approach to overcome the obvious limits and weaknesses of the dominating (and at that time rather progressive) technocratic approach of ‘advanced end-of-pipe’ treatment (Jänicke 1984, 2002; Mez and Weidner 1997). It also was the basis of the ‘Alternative Governmental Declaration’ published in the journal *Natur* (not to be confused with *Nature*) shortly after the general elections in 1983 and it had a strong influence on the political discussions of environmental issues in Germany, in particular in Social-Democratic circles, the trade unions and, later on, also within Bündnis 90/Die Grünen (Jänicke 2000: 4).

This essentially technology-related concept soon enjoyed broad acceptance by all major groups in Germany, and in a rapid diffusion process it also found positive acknowledgment in many other countries and became the leading concept for environmental policy at the EU level (Mol and Sonnenfeld 2000; Hajer 1995). In Germany, the concept did not only attract the business sector but also the conservative (CDU) and liberal (FDP) parties (Weidner 1999). EM could be characterized as a modernized, more foresighted, prevention- and market-oriented version of the preceding environmental policy approach. It suits the vision of an *eco-social market economy*, and, most of all, it is in compliance, or at least in a non-antagonistic relationship, with the existing social, political, and economic structure: “The zero-sum game perception of environment versus economic growth was replaced by a common denominator for development of industry and preservation of ecology” (Andersen and Massa 2000: 337). EM perceives the environmental challenges not as an unsolvable systemic crisis but as an opportunity to modernize the economy and basic social and political institutions in the era of globalization (see Weidner and Jänicke 2002). The core philosophy of EM is to solve environmental problems by making capitalism less wasteful and thus more sustainable while retaining the basic system of capitalist production and consumption (cf. Loske 1997).

The current government claims that an increase in energy and resource efficiency will not only lead to a (further) de-coupling of economic growth from resource consumption and emissions but also generate advantages in international competition and opportunities to tap new markets and relieve private and public budgets significantly. New flexible market-oriented, negotiation-based, and participatory instruments as well as persuasion, consen-

sus building, and stakeholder-oriented policies are thought to be most suitable forms of governance for establishing a broad ecological-modernization alliance in society in order to increase and safeguard welfare for all members of society. The eco-tax reflects this optimistic (win-win) idea perfectly. It is expected to return a 'double' (or even 'triple') 'dividend': improve the environmental situation and save resources while at the same time creating the possibilities for new jobs (and reducing production costs through increasing efficiency as well as fostering innovations).

In both of its environmental performance reviews of Germany (OECD 1993, 2001), the OECD comes to an overall positive judgment with respect to environmental policy achievements. It was especially emphasized that the decoupling of economic growth from the flow of several major pollutants in the past two decades "is (an) indicator of Germany's remarkable achievement in reconciling economic growth and environmental objectives" (OECD 1993: 205). The second review of 2001 gives even a slightly more positive evaluation of Germany's achievements. In particular, it highlights the improvements in emission reductions and the continuing efforts to reconcile economic growth and environmental protection. The ecological tax reform is praised as an important step in the right direction. The wide-ranging and successful programs of international cooperation are also acknowledged. Compared to the long list of laudable achievements, the list of shortcomings may seem rather brief. However, it contains some 'wicked' problems with high relevance for the global and national environmental situation. The OECD emphasizes the following areas: nature conservation, biodiversity, agriculture, transport, subsidy policies (with 'perverse' environmental effects), public participation and access to environmental information.⁴³

43 The 2001 report also mentions the little progress in strategies for a sustainable development. This critical view of Germany's sustainability policy is still shared by most—not only environment-minded—groups, and many of them are doubting very much that the specific German version of the concept of ecological modernization is sufficient to pave the way for sustainable development (cf. SRU 2004). As mentioned above, the concept basically rests on expectations that conflicting goals can be resolved by consensus and by developing win-win strategies. However, it is already clear that transforming the most problematic areas—agriculture, land use (soil degradation), coal industry (subsidies), stabilization of resource use, and transport—in the direction of sustainable development will not only create 'losers,' but will also come up against powerful, structurally vested interests. As yet, the new red-green government has not systematically focused its environmental policy on those most restrictive areas and powerful target groups—with the exception of the agricultural sector, where the mad-cow disease and the fundamental changes of the EU strategy in agriculture policy in the course of the EU enlargement process ('Agenda 2000') opened a window of opportunity for structural change.

Concerns of equity played—and still play—only a minor role in the government’s concept of ecological modernization and its implementation. Certainly, neither notions of *intra muros* fairness (distributional effects in Germany) nor *extra muros* fairness (global effects) have been the most important driving force in governmental climate policies. The underlying assumption is that the expected overall positive effects of this ecologically informed modernization strategy will lead, in the medium and long term, to a shift towards, and an increase in, sustainable (ecologically sound) welfare for all members of society, thereby reducing environmental and economic inequities. Only in the rare cases where equity aspects have led to intensive public debate—as was the case with the eco-tax—did the government introduce some compensation measures to alleviate the most detrimental effects for special groups. Yet, this was not done in a way that systematically focused on equity concerns but mainly to calm down heavy criticism. Obviously, considerations of equity within Germany will play a bigger role in the discussions of envisaged structural changes which are intended to lead to a better integration of environmental concerns in ecologically problematic sectors, such as agriculture, transport and coal mining (cf. Bundesregierung 2002).⁴⁴ It seems, however, that the government in its discussions focuses more on compensation for losers in cases of forceful opposition and sharp conflicts than on equity concerns as such.

The peripheral role of equity concerns in the government’s EM policy is also reflected in the kind of scientific analyses it has launched to examine the effects of its programs and policies. Legal, economic, and ecological effects are usually studied in deep detail, whereas equity aspects are mostly dealt with under the issue of employment effects.⁴⁵ This is especially the case with international and global activities of the German government.

44 See also the report of the Enquete-Kommission des Deutschen Bundestages, ‘Nachhaltige Energieversorgung unter den Bedingungen der Globalisierung und Liberalisierung,’ Deutscher Bundestag, Drucksache 14/9400 of July 2, 2002.

45 The highly aggregated treatment of distributional effects is, for instance, reflected by the statement that with the governmental promotion of renewable energy the average household will only be additionally burdened by € 8 per year, whereas in 2001 the benefits—including ‘avoided costs’ (health damages, crop losses, etc.)—should have amounted to € 2.5 billion, i.e., about € 65 per household (UBA 2002a: 5). In a recent study carried out by the economic research institute RWI (Rheinisch-Westfälisches Institut für Wirtschaftsforschung) on the basis of the revised renewable energy law, the additional burden for an average household is estimated to be at least € 2 per month, adding up to € 24 per year (*Wirtschaftswoche*, No. 17, 8 April 2004: 26).

3.3 Sustainable Development Policy

3.3.1 The Federal Government's Sustainable Development Policy

Germany doubtlessly is a latecomer concerning the institutionalization of a Sustainable Development (in the following: SD) policy based on Agenda 21 and the Rio Declaration of 1992, informed by the so-called Brundtland Report of 1987 (Jänicke and Jörgens 2000; OECD 2002). When the federal government finally adopted the National Sustainability Strategy in 2002, more than two thirds of the OECD countries already had a National Environmental Plan (Weidner and Jänicke 2002). At first sight, this may be a surprising development, since the German government was not only among the influential supporters of the basic goals of the Rio Summit but also a pioneer in important environmental areas (especially climate change policy) and still remains in the leading group of countries concerning performance (and not merely programmatic achievements). With Volker Hauff a German was the vice-chairperson of the UN World Council on SD. Moreover, the whole idea of SD has its historic roots in the German forestry management concept of the 18th century (cf. UBA 1995). The main explanation for this paradoxical development may be the strong 'path dependency' of decisive actor groups and the institutional setting of Germany's rather successful environmental policy based on the precautionary principle. These actor groups embraced large parts of the public environmental administration, the federal *Umweltbundesamt* (environmental protection agency), the Council of Environmental Experts (SRU), and many NGOs, especially from the business sector (cf. Tremmel 2003). They adhered to the EM concept that, especially from a practice-oriented perspective, is much more coherent, institutionally well-embedded and allows for the development of clear-cut environmental strategies by the government (cf. SRU 2002). In addition, many representatives of the scientific community (especially economists) have always felt a deep and persistent aversion towards the vagueness of the SD concept—a feature that furthered the almost inflationary increase of conceptual variations and the rather arbitrary inclusion of almost all societal and social issues (from, so to say, crime to kindergartens). It might well be that the negative attitude of many environmental proponents was also the result of a mistrust in the seriousness of the *environmental* commitment of economic interest groups and trade unions, of past experience with the strong resis-

tance of some polluting sectors (e.g., coal mining, agriculture, transport) and their political clout or with the former (and later on abolished) legal clause of 'economic acceptability' (*wirtschaftliche Vertretbarkeit*) that was used mostly to weaken environmental interests and can be seen as an early (but failing) attempt of integrating systematically economic and ecological concerns.

As there already exist good and detailed analyses of the government's responses (and their contexts) to SD (e.g., Beuermann 2000; Jänicke, Reiche and Volkery 2002), it should suffice here to point out only very briefly the most salient events and outcomes of the altogether slow political process and the basic features of the official government concept.

The Brundtland Report, published in 1987 and immediately translated into German (Hauff 1987), attained in Germany only a low profile. Especially within the environmental administration and influential circles of the scientific community the report's core ideas and approaches were disliked strongly. In simple words: the SD concept was perceived as being overly complex, too vague, full of ambiguities and contradictions, and a potential threat to the achievements of environmental policy made on the grounds of its basis principles—especially the precautionary principle—and its legal-institutional setting. The appointment of the 'National Committee' on SD by Chancellor Kohl in 1991 did not change this situation significantly. This committee was designed as a pluralistic body to ensure the participation of all major groups in the preparation of the national report on environmental policy to be submitted to UNCED in Rio 1992. It primarily described the German environmental policy approach of integrating the SD concept into its own approach. The discussion of SD grew in intensity only after the Rio Summit when two expert councils—the Council of Environmental Experts (SRU) and the Scientific Council on Global Environmental Change (WBGU)—issued reports on the SD concept. In 1994 the government approved of the report 'Environment 1994—Policy for a Sustainable Development' (BMU 1994). But only the publication of the study 'Zukunftsfähiges Deutschland' (Sustainable Germany) in 1995—prepared by the Wuppertal Institute for Environment, Climate, and Energy on behalf of two prominent NGOs (BUND and Misereor)—was able to trigger a broad and lively debate and put pressure on the government to respond with a more concrete program.

Due to growing expectations from abroad and meanwhile also from NGOs and environment-related institutions in Germany, the conservative-liberal

government strengthened its efforts in preparing a national strategy. In June 1996 the then acting Minister of the Environment, Angela Merkel, presented a discussion paper, 'Steps towards Sustainable Development—Environmental Goals and Main Activity Areas for Germany,' proposing six priority areas for action. One year later, the (renamed) National Committee on Sustainable Development—the major actor group in this process of taking 'steps towards SD'—published and discussed the results of its various subcommittees. This paper was the basis of the SD report of 1998, which had the status of a draft and was published by the Ministry of the Environment.⁴⁶ However, this report did not become an official (adopted) government paper.

In 1997, the federal environmental protection agency published its study 'Sustainable Germany' (*Nachhaltiges Deutschland*, UBA 1997), which put strong emphasis on the integration of economic, social, and ecological concerns in close combination with the precautionary principle. This was in line with the basic idea of the highly acknowledged interim report (Concept Sustainability) of the Federal Inquiry Commission 'Man and the Environment' established in 1992.⁴⁷ The Council of Environmental Experts had also published three of its main reports with a strong focus on conceptual, political, and institutional aspects of SD (in 1994, 1996, and 1998). All the reports and studies mentioned strongly stimulated and framed the political and expert discussion on SD, but only rarely the public discourse that was dominated clearly by the publication of the Wuppertal Institute (see Weidner and Brandl 2001).

The new red-green coalition government, which came into power in autumn 1998, made sustainability the leitmotif of the whole governmental policy (see Koalitionsvereinbarung 1998). Partly in order to underline the reliability of this commitment, a so-called Green Cabinet was established in July 2000, consisting of the Secretaries of State of ten ministries and chaired by the Head of the Chancellor's Office. This body is mainly involved in coordination and integration of SD policies and strategies within the federal government. About one year later, in April 2001, the Council for Sustainable

46 'Nachhaltige Entwicklung in Deutschland. Entwurf eines umweltpolitischen Schwerpunktprogramms.' This draft of an SD strategy—as the subtitle implies—focuses almost exclusively on ecological aspects. However, it contained rather demanding (and quantified) goals.

47 The final report, 'Konzept Nachhaltigkeit—Vom Leitbild zur Umsetzung,' was published in 1998.

Development (*Rat für Nachhaltige Entwicklung—RNE*) was called into being. Its 18 members from various ‘major’ public and private institutions and organizations are appointed by the government (see <<http://www.nachhaltigkeitsrat.de>>). The first, and still acting, chairman of this council is Volker Hauff, an experienced former politician and former vice-director of the WCSD (Brundtland Commission). The council’s task is to do research and make proposals on how to achieve the goals of the government’s national SD strategy, ‘Perspectives for Germany,’ which was published after several months of organized public and expert discussion of a draft version (see <<http://www.dialog-nachhaltigkeit.de>>) in April 2002, shortly before, and as a contribution to, the World Summit on SD in Johannesburg.

The SD strategy is meant to serve as a guideline for the way towards an economically competitive, socially fair, and ecologically sound development and to represent the ‘strategic response to the challenges of globalization’ (Chancellor Schröder in his preface to ‘Perspectives for Germany: Our Strategies for Sustainable Development,’ April 2002). Four general criteria for coordination set the frame for the development of concrete policies: justice between generations (intergenerational equity), quality of life, social cohesion (including avoidance of social cleavages and inequalities), and international responsibility. Altogether ‘ten rules for managing sustainability’ are to guide the activities, which in the beginning will concentrate on seven areas of action. Three of these areas shall be given higher priority. They mainly concern environment-related issues, namely climate and energy; mobility, environment; health and food. The strategy paper states that the international dimension of SD will be given special consideration, in particular ‘overcoming the North-South divide.’ A separate chapter, ‘Taking on global responsibility,’ provides details on these statements (e.g., fight against poverty, intensified development collaboration, support of global protection of the environment and natural resources). With the help of 21 key indicators of sustainability (including eight environmental indicators) Germany’s performance on the road to SD will be monitored. Two of the non-environmental indicators reflect international equity concerns: expenditure on developmental cooperation and EU imports from developing countries. This SD strategy, along with the ‘German Environmental Report 2002’ (adopted in March 2002 by the government), provided the programmatic and informational basis for Germany’s participation in the WSSD in Johannesburg in August/September 2002.

The first ‘progress report’ was given in October 2004 (Bundesregierung 2004).⁴⁸ Its ‘vagueness’ concerning relevant issues and the altogether negative balance compared to its goals—with few exceptions, such as climate gas reduction, increase of renewable energy—was criticized by various NGOs and also by the Council for Sustainable Development (see <<http://www.nachhaltigkeitsrat.de>>). The NGOs, in particular, criticized the silent abandonment of the former goal to reduce CO₂ emissions by 25 percent until 2005. The media took almost no interest in the report and its discussion.

The general elections in fall 2002 brought a slight majority for the red-green coalition government. The new coalition agreement, ‘Renewal, Justice, Sustainability’ (*Erneuerung, Gerechtigkeit, Nachhaltigkeit*), highlighted again the importance of SD for the government’s general political activities. But, as a matter of fact, the continuously worsening economic situation, increasing unemployment rates, the success of the opposition parties in various state and local elections and the (then) threat of a war against Iraq gave SD a rather low ranking on the governmental and public agendas,⁴⁹ although—at least so far—there have not been any drastic setbacks from what has already been achieved. In climate and energy policy the progressive trend generally subsisted; and Germany is still one of the few countries playing a progressive role in almost all important international programs, policies, and negotiations intended to cope with global environmental challenges.⁵⁰

48 In spring 2004, a public discussion process was started, dealing with the discussion paper (*Konsultationspapier*) on the government’s planned progress report of its SD policy. The discussion process was organized by the Council for Sustainable Development (RNE) (cf. <<http://www.nachhaltigkeitsdiskurs.de>>). For the first progress report, see <<http://www.dialog-nachhaltigkeit.de>>.

49 However, in January 2004 the national parliament established the ‘Parliamentary Council for Sustainable Development’ (*Parlamentarischer Beirat für Nachhaltige Entwicklung*) consisting of nine members of parliament. Among its tasks is the support and promotion of the implementation and further development of the national SD strategy (cf. <http://www.bundestag.de/parlament/parl_beirat/arb.html>).

50 In its 2004 report, the SRU assessed for the second term of the government (since 2002) slackening dynamics in environmental policy. In particular, the council criticizes the completely inadequate efforts of the government to reduce the use of coal in energy production. It recommends the development of a strategy of ‘transmission management’ for the coal mining sector, including a phase-out of subventions for hard coal, accompanied by compensations for the social consequences of such a structural change. This is of special significance since in the coming years the energy sector will enter a phase requiring a comprehensive modernization of power plants, including new construction (in the range from 40 to 70 GW). The newly increasing CO₂ emissions—in the energy-generating sector by 6.4 percent (1999-2002)—is mainly attributed to the opening of new coal-fired power plants.

Aside from clearly existing self-interests among German protagonists of a progressive (national and global) climate protection policy, the focus of Germany's SD strategy on this policy area is also highly justified by the SD concept itself, as developed by the Brundtland Commission: In the Brundtland Report 'Our Common Future,' the ultimate limits to global development are seen as being determined by "the availability of energy, and the biosphere's capacity to absorb the by-products of energy use" (Langhelle 2000: 311), and climate change is deemed to be the potentially most serious of all environmental issues facing the world today (WCED 1987; see also Yearley 1996: 80 ff., 130 ff.). Furthermore, climate change is directly linked to social justice within and between generations, because the vulnerable countries will benefit disproportionately more from many of the positive effects of Germany's climate policy, and many of the likely impacts of climate change will be felt rather by future generations than by the current one.

3.3.2 Local Agenda 21 Activities

Chapter 28 of the Agenda 21—adopted as an action program towards SD by more than 150 governments at the UNCED 1992 in Rio de Janeiro—deals with the role of local actors in SD processes. It recommends, *inter alia*, that local authorities should start a broad-based pluralistic dialogue to establish and implement mutually agreed action programs to contribute to global sustainability by achieving sustainability at the local level. As a consequence of the public's low interest in SD and their limited knowledge about related international developments as well as a lack of support from the federal and state levels, German municipalities for a long time lagged behind many other countries in establishing Local Agenda 21 (in the following: LA 21) initiatives (see Lafferty and Eckerberg 1998; ICLEI 2002; BMU and UBA 1999; UBA 2002b).

Aside from some pioneering municipalities (e.g., Berlin-Köpenick, Munich), a significant increase in activities did not occur until 1997/98 when better financial and organizational support by the federal government started to take effect.

In 1996 there were only 59 formal decisions by local authorities to establish an LA 21,⁵¹ 1998 showed a jump to 1250, and in summer 2004 the

51 For general information on LA 21 in Germany, see BMU and UBA 2000.

number had risen to 2471 (see <[http://www. agenda-service.de](http://www.agenda-service.de)>), covering 19 percent of altogether 13579 *Kommunen* (including villages, municipalities, counties). The change in government in 1998 has led to a moderate increase in federal support of LA 21 initiatives; the main means of support remains the provision of information and advice (see BMU 2002a: 24-25). However, only 150 Local Agendas have been fully prepared and in some form ‘enacted’, and of these only three have been formally enacted so far by the elected bodies and governmental authorities of the local level (the cities of Leipzig and Munich, and Köpenick, a district of Berlin).⁵² Furthermore, in the late 1990s some states started with the formulation of State Agenda 21 initiatives (e.g., North-Rhine Westphalia, Lower-Saxony, Bremen, Hamburg). With only a few exceptions (especially North-Rhine Westphalia) most LA 21 initiatives concentrate on environmental and related matters (e.g., climate, energy, transport, land use, construction). The social dimension of the (so-called three-pillar) SD concept usually plays a minor role. This also holds true for fundamental issues of so-called one-world aspects, such as international and intragenerational solidarity and equity considerations (see UBA 2002b; BMU and UBA 1999; BMZ 2002).⁵³ These aspects will be dealt with in more detail in section 4.3.

Local-level climate protection measures do not only take place in connection with LA 21 activities. For several decades they have taken place in the context of general environmental policy and related measures in air pollution control, traffic control and energy-saving policies.⁵⁴ These activities, however, rarely have a global perspective. But the special climate protection networks that evolved in the 1990s do have a global perspective (in particular, focusing

52 It is estimated that only a small share of those local communities which had formally decided to establish a LA 21 are still actively involved in the process; some experts believe this share to be no bigger than 10 percent (cf. IFOK 2004: 71).

53 The Ministry for Economic Cooperation and Development (BMZ) came to the conclusion that in German LA 21 processes development policy still remains a highly neglected issue (“Innerhalb von Lokalen Agenden 21 in Deutschland stellt Entwicklungspolitik insgesamt immer noch ein stark nachrangig behandeltes Themenfeld dar ... mancherorts [herrschen noch] karitativ motivierte Hilfeleistungen [vor], die eine Geber-Nehmer-Mentalität fördern und manchmal mehr zerstören als aufbauen” (BMZ 2002: 10) (“In German Local Agenda 21s, development policy is still a highly neglected issue ... in some instances charitable aid still prevails, which fosters a giver-taker mentality and sometimes destroys more than it constructs”; author’s translation).

54 For local-level competencies and scope of action, see Klima-Bündnis (2000: 5-6); Blümling (2000).

on developing countries).⁵⁵ The most important networks are the Climate Alliance (Klima-Bündnis/Allianza del Clima), Energie-Cités and Cities for Climate Protection (renamed Local Governments for Sustainability).⁵⁶ Communities joining these transnational networks commit themselves to especially active climate protection policy. The Climate Alliance is the only network with an explicit focus on developing countries.⁵⁷ Its members have even pledged to reduce CO₂ emissions from 1990 levels by 50 percent until 2010. In spite of this ambitious target, the Climate Alliance (founded in 1990) has—with more than 400 communities—the largest membership; Cities for Climate Protection has eight members, and Energie-Cités ten (as of 2004). Since recent years membership in these networks has stagnated or even decreased. In their annual report 2002/2003 the Climate Alliance criticized the weak position of climate protection policy at the local level (Klima-Bündnis 2003: 3).

The basic idea of the LA 21 concept is to develop a local strategy through a broad participatory process of dialogue among citizens, the administration, NGOs and representatives of the local business sector. Although the commitment of German municipalities to LA 21 activities strongly increased in the late 1990s, the general public knows little about the concept. In 2004, only 16 percent of the sample of a representative survey had heard of LA 21 activities in their community (2000: 15 percent) (BMU 2004: 70).

3.3.3 Summary: Main Characteristics of Governmental SD Policy

Germany is a pioneer in ecological modernization (EM) but a laggard concerning the institutionalization of the SD concept. After the red-green government came into power in 1998, some elements of the SD concept gained in importance in the course of a shift from formerly *weak* EM towards a concept of *strong* EM (see Christoff 1996, for this conceptualization). From a different perspective, it could be described as the ‘greening of sustainability’

55 In 2001 the (small) institution ‘Servicestelle Kommunen in der Einen Welt’ (Service Agency for Local Communities in the One World) was jointly established by the governments of all levels. Its special task is to support North-South cooperation by networking, offering information and advice, etc. (see <<http://www.service-eine-welt.de>>).

56 For information on Cities for Climate Protection, see <<http://www.iclei.org/CO2/index.htm>>; on Energie-Cités, <<http://www.energie-cites.org/index.htm>>; on Klima-Bündnis, <<http://www.klima-buendnis.org>>.

57 In particular, the ‘Declaration of Bolzano’ from May 2000 emphasizes the realization of ‘global justice’ as one aim of the Klima-Bündnis.

as called for by the German Council of Environmental Experts and the Association of European Environmental Counselors (Jänicke and Volkery 2002: 11). Compared to the 1994 coalition agreement of the conservative-liberal government where SD was primarily related to environmental and development policy, the agreements of the red-green coalition of 1998 and 2002, respectively, gave SD a broader definition and a more prominent position in governmental policy making. Although the three-pillar concept of SD is favored programmatically by the red-green government, the practiced concept—the ‘real-type’ SD—is better characterized as ecologically sustainable development or sustainable ecological modernization. This is also the result of the dominating role of the Ministry of the Environment in the national and international SD process.

With respect to the weight attributed to the three dimensions of SD, the federal government and the ministers and institutions involved more or less accept the equal ranking of the three dimensions, at least rhetorically. Taken by their concrete activities, however, a more differentiated judgment evolves. The Minister of the Environment clearly points at the salient role of the ecological dimension; the Minister for Developmental Cooperation emphasizes both the ecological and social dimensions (poverty reduction as a basic precondition for nature protection); the Ministry of Agriculture only recently (after its reorganization in response to the BSE catastrophe, now: Ministry of Consumer Protection, Food, and Agriculture) highlights the ecological and also the social dimensions as does the Ministry of Transport, Construction and Housing, whereas most of the other ministries put economic aspects first. The general picture is such that the ministries interpret the SD concept in favor of the specific concerns of their policy area by selecting that dimension as the most or more important one that meets their interests best. This becomes quite evident, for example, in the compromise on the national allocation plan for emission trading reached in March 2004: The Ministry of Economy acted in the interest of international competitiveness of the German economy and was able to carry through its position against the Ministry of the Environment.

This kind of SD interpretation, biased by organizational interests, is also reflected in the (although not fundamentally) different views taken by the Council of Environmental Experts and the Council for Sustainable Development. While the latter supports the equality of the three dimensions (and

frequently stresses that SD is *not* environmental policy), the former puts environment first (*'dauerhaft-umweltgerechte Entwicklung'*) and attributes more weight to economic rather than social aspects, at the same time calling for an integration (i.e., systematic consideration) of environmental concerns in all policy sectors (for the political-strategic reasons, see SRU 2002). In their concrete activities, the majority of environmental NGOs are in line with the interpretation of the SD concept by the Council of Environmental Experts and the Ministry of the Environment, but programmatically they put more emphasis on the objectives of international and intergenerational justice. Mainstream environmental NGOs also regard EM as the best means for transforming industrial society in a sustainable way.⁵⁸ Criticism of a 'socially slimmed' concept is mainly heard from the Christian churches, developmental organizations, and some academics.

Apart from programmatic differences between various governments and ministries, the bulk of concrete policies subsumed under the heading of SD consists of a combination of (state-of-the-art) end-of-pipe-based measures and of a mainly technologically oriented promotion of innovation (especially energy efficiency) in various sectors. However, compared to its conservative-liberal predecessor the red-green government displays rather a trend towards 'strong' ecological modernization with more consideration of long-term effects (and, as a consequence, planning and strategic aspects) and both positive and negative effects of other policy sectors, economic structures, and consumption patterns on environmental performance. The greater, but rarely successful efforts on integrating environmental concerns in other policy sectors has also directed increased attention to potential 'losers,' their capacities for political resistance and strategies, and policies for winning their cooperation for an ecological structural change (*ökologischer Strukturwandel*) in a socially compatible way. A good example here is the dialogue with the coal mining industry started by the Council for Sustainable Development in 2003 (see <<http://www.nachhaltigkeitsrat.de>>).

58 In a joint statement of various NGOs (DNR, Nabu, BUND) on the 'consultation paper' of the national government on the SD progress report, the government was called on to put more weight on ecological aspects when amending its SD strategy. See RNE, 'Umweltverbände kritisieren Nachhaltigkeitspläne der Regierung,' <http://www.nachhaltigkeitsrat.de/aktuell/news/2004/17-03_06/cont>. For a critical assessment of the effects of the national SD strategy by German ENGOs, see <<http://www.nachhaltigkeits-check.de>>.

Although nowadays aspects of integration do play a larger role, the current SD policy of the German government is not at all based on a 'holistic approach.' Such an approach is often demanded by NGOs and some scientists, although, as far as I know—apart from highly abstract (and sometimes highly sophisticated) models—no practice-oriented feasible 'holistic' policy concept has been developed that would be suitable for day-to-day policy operations. The increase in commitments to sustainability as a holistic approach made by the Ministry of Environment since 1998 may be less the result of the minister's affiliation to the Green Party than an opportunistic adaptation to the pressure for convergence exerted by developments and discourses on SD at the international and EU levels. Finally: if Germany's SD policy is (rightly) criticized for still being biased in favor of environmental concerns, one should keep in mind that, aside from few exceptions (possibly development policy), in environmental policy-making social and economic aspects are taken into consideration more often and in greater depth than, vice versa, environmental concerns are reflected in other, especially social and economic, policy areas. From a cross-national perspective, there are governments which have institutionalized a 'purer' SD concept than the 'diluted' German version (see Lafferty and Meadowcroft 2000; Weidner and Jänicke 2002; for Sweden, see Lundqvist 2004). But only very rarely does this correspond with better performance in the three relevant SD dimensions.

All in all, the current German 'realtype' of SD policy could be characterized as coming closer to the true content of the environmental policy concept of the early 1970s (see the Quick Start Program of 1970, the Environmental Program of 1971 and its modified version of 1976), which was based on the key principles precaution, cooperation and polluters' responsibility and not only stressed the importance of intra-policy, cross-sectoral integration, and international cooperation but also raised the awareness for the effects of problem-shifting and problem accumulation and the need of focusing policies more on the causes of problems and less on their effects (Weidner 1999, 2002c).

Thus, the German SD policy discourse is characterized by a partly aggressive (especially when specialized NGOs are involved) but mostly 'passive' competition of two (overlapping) discourses, the SD and EM discourses. The former slightly dominates the programmatic rhetoric level, whereas the latter clearly guides governmental activities. This contributes to the confusion that

there are different definitions of both concepts. Correspondingly, the ambiguity of Germany's SD policy is not only the result of the inherent vagueness of the SD concept as such and the lack of a generally accepted 'authorized international version' of SD, but also reflects different goals and interests of major actor groups in Germany, which leads to conceptual compromises. Even within the Council for Sustainable Development there is no comprehensive 'reference concept' agreed upon by all members. As for the public, the broad majority is obviously unimpressed by rhetorical meta-discussions and judges SD policy mainly by its environmental performance.⁵⁹

4. Attitudes Towards Climate Change Policy and Equity Concerns

4.1 Public Attitudes

4.1.1 The Surveys 'Environmental Consciousness in Germany'⁶⁰

In Germany, public awareness of environmental problems, especially so-called global environmental challenges, is still high, although other issues have become more important since the 1990s. According to the recent representative survey of 2004 (BMU 2004; see also Grunenberg and Kuckartz 2003, for the 2002 survey), unemployment clearly dominates the public agenda (55 percent); 'economic situation' ranks second (20 percent) while 'environmental protection' shares third rank along with 'social justice.' Only 18 percent chose it as the 'most urgent issue to date' in Germany,⁶¹ which represents an increase of 4 percent compared to 2002. The importance attributed to environmental protection dropped from 70 percent in 1988 to a mere 14 percent in 2002. However, this does not indicate satisfaction with

59 In 2004, the term 'sustainable development' was known only by 22 percent of Germans—and only half of those who knew about it had a fairly correct understanding of its meaning (BMU 2004: 69).

60 These surveys have been conducted biennially since 1996.

61 Open question—multiple answers were possible. When people were asked about the relevance ('very important') of ten specified political task areas, environmental protection ranked eighth, after reducing unemployment, securing pensions, stimulating the economy, pursuing social justice, health protection, improvement of education, and more effective crime prevention (in decreasing order of relevance). While in 2000, 53 percent and, in 2002, 51 percent of the interviewees had stated that effective environmental protection was a 'very important' political task, in 2004, only 45 percent responded in this way. However, compared to the surveys of 1998, 2000, and 2002, the number of those who deemed environmental protection less important (seven percent) or not at all important (one percent) did not (or only minimally) grow.

the situation as it is, for 65 percent of the sample want the government to strengthen environmental policy (and only three percent want it to do less).

As to the various environmental problems (see also Kasemir et al. 2000) to be tackled, climate policy ranks third, i.e., 59 percent say that a significant reduction of greenhouse gases is very important (rank one: protection of water, soil and air; rank two: saving energy resources and raw materials). When asked about climate protection in the last five years in Germany, only 13 percent perceived 'much progress' while 53 percent stated that 'no significant progress' was made; 28 percent even thought the situation had worsened. Compared to 2000 the positive assessments ('much progress') slightly increased (by four percent) and the negative statements ('rather worse') decreased by three percent. Only 35 percent are now very satisfied or satisfied with the role Germany played in the international climate negotiations, and 56 percent (2002: 47 percent) of the sample would like to see Germany take the leadership in EU climate policy. The vast majority (84 percent) perceives the development of global environmental quality as very alarming/quite alarming, and 85 percent believe in a perceivable global warming in the future.⁶² The majority (85 percent) is also fully, or quite, convinced that a scenario of rising sea levels and shifts of climate zones due to rising temperatures is realistic. More than half (46 percent) of the interviewees are afraid that the effects of global climate change will be extremely/very dangerous for themselves and their families; only 16 percent are hardly or not at all afraid of negative personal effects. Optimistic views concerning the chances to prevent a climate change have slightly risen compared to 2002: from 50 to 52 percent. On the other hand, 48 percent are still less or not at all convinced that climate changes could be stopped.

The surveys included no direct questions concerning national or international issues of equity/fairness and the willingness to pay for climate mitigation or compensation measures in other countries. Yet, among ten items to choose as 'very important,' the issue of improving environmental policy in developing countries ranked only ninth. On the other hand, 88 percent agree with the principle of 'intergenerational justice,' i.e., the environment should

⁶² According to an EU Survey of 2002 (Flash Eurobarometer Survey), 72 percent of the German respondents are concerned about climate change. *Nota bene*: this survey also included no equity-related questions (see <<http://europe.eu.int/comm/environment/barometer/index.htm>>). For the German survey data, see <<http://www.umweltbewusstsein.de>>.

not be exploited at the cost of future generations, and 82 percent support the idea to save natural resources and not use more than can be reproduced.⁶³ With respect to developing countries 84 percent, support *in general* the principle of fair trade (“there should be fair trade between the rich countries and the developing countries”), and 70 percent would be prepared to pay more for fair-trade products. Although the reduction of energy consumption as a general political goal enjoys broad support, a majority of the interviewees of the 2002 survey (64 percent) is only prepared to pay more for energy-efficient home appliances if there is also a personal benefit.⁶⁴ This means that purely altruistic additional expenditures for climate protection do not find support from a majority.

For the political practice the willingness to pay is more important than general attitudes towards abstract universal principles. With respect to the well-known wide gap between environmental consciousness and attitudes on the one hand and environmental behavior on the other hand, it provides a more realistic (though not yet realistic) measure of assessing how people would behave. Compared to the 2002 survey, in 2004 the willingness to accept additional personal burdens in favor of environmental improvement has increased by about two percent (but is still lower than in 2000). Yet still 61 percent would accept a lower standard of living to support environmental protection,⁶⁵ but only 48 percent (three percent more than in 2002) would accept higher taxes, even if they were used directly for environmental protection. But, even more important: a (rising) majority of 58 (2002: 52) percent is against the so-called eco-tax (26 percent—compared to 29 percent in 2002—support it), and a clear majority of 73 percent criticizes eco-taxes for being

63 Correspondingly, there is a majority of 70 percent in support of the construction of additional wind power facilities, although quite large parts of the sample worry about negative side-effects, such as disturbing the beauty of landscape.

64 Only a tiny minority of three percent buys so-called eco-electricity, although it is often only slightly more expensive than conventional electricity. Compared to 2002, the readiness to switch to eco-electricity has decreased. This attitude is obviously a result of lacking and/or wrong information about the costs and effects of a switch (BMU 2004: 86).

65 According to the 2000 survey data, even fewer respondents (43 percent in West Germany and 27 percent in East Germany) were prepared to accept a lower personal standard of living in favor of environmental protection. The analysis of various related items comes to the conclusion: “... that for most citizens their readiness to contribute personally to environmental protection stops when financial burdens and lower standards of living are asked for” (Statistisches Bundesamt 2002: 519-520, author’s translation). “The willingness to make material sacrifices has decreased considerably between 1993 and 2000” (*op. cit.*: 521).

socially unfair, which is an increase of five percent compared to 2002 (see also Dahinden 2000).

When people refuse to carry a relatively moderate financial burden, which, in large parts, is even compensated by indirect returns, how would they react if parts of the tax revenue were transferred to developing countries according to the universal fairness principle? Aside from such a rhetorical question, present data give reason to strongly doubt that a policy might be broadly accepted and supported that seriously pursues the implementation of the principle of international justice. These doubts are strengthened by the fact that public debate on Official Development Aid (ODA) is almost inexistent and that there is no relevant public pressure on the government to meet international commitments to raise ODA to 0.7 percent of Gross National Product (GNP).⁶⁶

4.1.2 Various Surveys on Environmental Consciousness

This general assessment that global equity issues do not play a prominent role in the German climate change debate of the general public is supported by data of the so-called Eurobarometer surveys, which have been conducted since 1990 about three times a year in the EU member states. An analysis⁶⁷ of the survey data since 1995 revealed that only Eurobarometer Surveys of 1995 (No. 43.1),⁶⁸ 1997 (No. 48.0), 1998 (No. 49.0), 1999 (No. 51.1), 2002 (No. 58.0) contained questions related to environmental issues dealt with in this paper. Concerning issues of 'equity/international solidarity' as well as

66 When the red-green coalition government came into office in 1998, German ODA was 0.26 percent of GNP and rose to 0.27 percent in the period of 2000-2002. The coalition contract of 2002 announced a further increase to 0.33 percent by 2006 as an interim step towards the 0.7 percent goal. About 8 percent of German ODA is contributed by the German states (2001). However, only 1 percent of this share is ODA in its true sense because almost 7 percent are used to support students from developing countries in Germany. Since 1995, in many German states ODA is on the decrease (Reuke, Schäfer and Albers 2003: 6-9; see also <<http://www.germanwatch.org/ez/bulae03.htm>>).

Compared to other OECD countries Germany's ODA (measured in percent of GNP as average of the period 1997-2002) ranks nine after Denmark (1.01 percent), Norway (0.86 percent), Netherlands (0.81 percent), Sweden (0.76 percent), France (0.38 percent), Belgium (0.34 percent), UK (0.28 percent), Canada (0.28 percent) and before Japan (0.27 percent), Spain (0.25 percent), Italy (0.15 percent) and USA (0.10 percent); in absolute figures, however, the USA contributes about one quarter of total ODA) (see *iwd-report*, Vol. 30, No. 12 of 18 March 2004, p. 1).

67 I gratefully acknowledge the support of Denis Huschka, M.A., for collecting and evaluating the survey data.

68 Numbers in parentheses identify the special survey of the year in question.

‘willingness to pay,’ Eurobarometer offers—quite similarly to the German surveys—only very general and sparse information, i.e., items have not been surveyed systematically and continuously over several years. Because of its timeliness I will first describe the results of the 2002 Eurobarometer survey which focused on the attitudes of Europeans towards the environment.

*Eurobarometer Survey 2002 (No. 58.0)*⁶⁹

With respect to environmental issues, the survey results indicate rather high problem awareness among Germans. Seventy-two percent of the German sample agree with the statement, “Modern technology has upset the balance of nature,” and a large majority rejects the statement, “Exploiting nature is unavoidable if humankind is to progress.” About 50 percent believe that “human activity can lead to irretrievable damage to the environment,” and 40 percent believe that “the deterioration of the environment can be halted by changing our way of life.”

Among global issues Germans were ‘very worried’ about climate change (44 percent), destruction of the ozone layer (42 percent), and the progressive elimination of tropical rain forests (41 percent); fewer were very worried about the extinction of animal and plant species (35 percent) and about using up natural resources that cannot be easily replaced (30 percent).

A majority of the German sample had the feeling that they could individually and effectively influence the state of the environment: 56 percent agreed with the statement, “My actions can make a real difference to the environment.” However, 36 percent claimed that the environment was an issue “beyond my control as an individual.”⁷⁰ This relatively positive judgment of individual control is partly reflected in individual behavior: 65 percent said that they were making an effort to take care of the environment, but felt their actions would only have an impact if others would make an effort on their part. This shows that a clear majority of the Germans favor an active behavior but, at the same time, prefer their actions to be part of a

69 For most items of the various surveys discussed in the remainder of this paper multiple answers were possible.

70 In both cases the EU average is 43 percent. This indicates that the Germans are less pessimistic and more optimistic than the EU average about their individual ability to influence effectively the state of the environment. Only the Finns (66 percent) and the Swedes (63 percent) are more optimistic in this respect

wider effort. 'Purely altruistic' behavior is favored by only 19 percent of respondents.

Although only nine percent of the German sample trusted the EU with respect to environmental issues,⁷¹ 38 percent saw the European Union as "the best level for taking decisions about protecting the environment." The choice of national government (31 percent) was followed by the United Nations (25 percent). Obviously, a large part of the German population prefers an international/supranational level of decision-making; the reason may be that the most important environmental problems (as seen by the majority) have a global dimension.

The interviewees were offered a range of solutions that "could most effectively solve the environmental problems" and were asked to select three (from eight). The ranking of choices shows that preference was given to regulations and constraints (making regulations stricter, with heavy fines for offenders: 52 percent; better enforcement: 51 percent), followed by persuasion and education (raising general environmental awareness: 46 percent). While a general rise of taxes, prices, etc. to cover environmental costs was supported by only six percent, 35 percent would welcome taxes for those who cause environmental problems. Giving environmental NGOs more say in environmental decision-making was chosen by 28 percent.

A tentative interpretation of these results with respect to the theme of this study reveals a certain ambivalence in attitudes. On the one hand, policies based on a general-universal solidarity concept (e.g., a general rise in taxes) will probably get no support by the majority, but, on the other hand, organizations such as environmental NGOs, which usually support this idea, are highly esteemed.

Eurobarometer Surveys 1995 (No. 43.1), 1997 (No. 48.0) and 1998 (No. 49)

These surveys show, *inter alia*, the high importance attributed to environmental issues and environmental policy by the German respondents. Question 38 of the 1997 survey may serve as an indirect indicator of international solidarity (confined to existing and prospective EU member countries). Asked

71 Environmental associations have the highest trust (59 percent), followed by scientists (34 percent), consumer associations (30 percent), national (9 percent) and regional/local governments (five percent), 'green' parties (seven percent). Trade unions and private companies (one percent each) enjoy much less trust.

how to proceed if EU enlargement meant that EU financial aid to less developed EU regions will be shared between more countries, a majority of 50 percent preferred an increase of the overall budget to make sure that German regions continue to receive as much aid as before.⁷²

Eurobarometer Survey 1999 (No. 51.1)

Like the 2002 Survey, 1999 Eurobarometer also focused on environmental issues but put special emphasis on willingness to pay. More or less in line with the 2002 results, only a minority of ten percent supported higher general taxes or prices in favor of environmental protection; a clear majority of 36 percent preferred financial instruments based on the 'polluter-pays principle.' With respect to various items a larger part of the interviewees would be prepared to pay more for healthy food and would support higher water prices as an incentive to save water. The willingness to pay more for flights, gasoline, electricity and private cars (the climate-relevant factors), however, was very low. Furthermore, those who would accept higher prices in favor of the environment were only prepared to accept relatively small increases.

The International Social Survey Program (ISSP) 1993

The ISSP 1993 (covering 21 countries) put an emphasis on environmental matters.⁷³ Almost 50 percent of the German respondents agreed with the statement, "I do what is good for the environment even if it costs more money or time." According to this survey, about 40 percent would accept higher prices and 26 percent also higher taxes in favor of the environment. Although, for methodological reasons, this survey is not directly comparable to the surveys presented above, a general trend of declining willingness to pay seems to have been taking place since 1993 (other issues, such as pensions, social welfare and the economic/employment situation were highly influential for this trend).

72 The alternative choice was: Keep the same budget, which implies that your country might receive less financial aid than before.

73 The 2000 ISSP also gave special emphasis to environmental matters, however, the items selected are of peripheral interest for this study.

Allensbach Survey 2004

The results of the privately organized representative survey 'Umwelt 2004' (Environment 2004),⁷⁴ conducted by the *Institut für Demoskopie Allensbach*, are by and large in line with the aforementioned surveys. Although social and economic problems clearly are seen as priority targets for counter-measures, still 53 percent of the population say that environmental issues should be given priority.⁷⁵ Seventy-seven percent are concerned about the effects of climate change (30 percent of these are 'very concerned'). Sixty-one percent have a very strong or strong interest in environmental issues; 48 percent are convinced that in Germany enough is done for environmental protection ('too much': 16 percent). This may be influenced by the fact that 43 percent are of the opinion that environmental pollution has decreased over recent years ('has increased': 19 percent). Fifty-nine percent say that, by and large, the environment in Germany is satisfactory (1990: 22 percent). However, when asked in which areas success has been made, climate protection ranks rather low: only 14 percent perceive a great success, 31 percent only minor or even no achievements. Consequently, 69 percent (second rank) argue that more should be done in favor of climate protection, and 62 percent deem a stronger support of renewable energies necessary. Generally, a large majority (81 percent) supports the idea that all citizens should engage in environmental protection, however, in the case of renewable energy sources 70 percent think this should be the task of the government. Correspondingly, 80 percent see almost no chance or no chance at all to contribute individually to the promotion of renewable energy (climate protection: 70 percent).

While in 1991 60 percent of the population expected that nuclear power will, in the long run, constitute the largest energy supply factor, in 2004 the majority of the population presume that long-term energy supply will be secured by renewable sources. There is relatively little criticism of public subsidies for solar energy (18 percent) and wind energy (23 percent). A clear majority of 44 percent prefers the Ministry of the Environment being the responsible institution for energy policy instead of the Ministry of Economy

74 Institut für Demoskopie Allensbach: Studie 'Umwelt 2004,' Allensbach, published in spring 2004.

75 Multiple answers allowed. Other issues related to climate change or energy policy are supported as follows: use of solar energy (38 percent), use of renewable resources (35 percent), energy saving (33 percent).

(25 percent). This may indicate that quite a substantial part of the public wishes less consideration of economic interest groups in energy policy making.

As for issues on which *development aid policy* should primarily concentrate, environment-related issues rank rather low (compared to issues such as improvement of health service and educational institutions or food supply). The careful use of natural resources received rank eight, the promotion of renewable energy rank 11 and the improvement of environmental behavior rank 13, the second to last rank.

The Main Actor Groups

There are no systematic studies on the attitudes of relevant German institutions and actor groups towards equity concerns with respect to energy and climate policy. The following brief overview of salient positions is based on an analysis of programmatic statements in official publications, press releases and newsletters of the relevant organizations (the various ministries, Sachverständigenrat für Umwelt, Rat für Nachhaltige Entwicklung, Agenda-Transfer, Agentur für Nachhaltigkeit, Verband Entwicklungspolitik deutscher Nichtregierungsorganisationen—VENRO, Service Agency Communities in One World—InWEnt).⁷⁶

(1) Government

Since the 1990s, governments (no matter whether conservative or ‘red-green’) have preferred, in balance, EM. The acceptance of a salient responsibility to curb greenhouse gas emissions in international negotiations has not been translated into an intra-governmental or national discourse on who will have to shoulder the burden of related policies in the short to medium term perspective. In its 2002 Report the Council of Environmental Advisors (SRU) seems to warn the government of too far-reaching commitments at the international level. The Council did this in a very cautious statement, embedded in complex syntax: “As to the problem of burden-sharing between industrialized and developing countries, German politics should be guided by an egalitarianism moderated through the acknowledgment of temporal scopes of

⁷⁶ For an analysis of the German climate change discourse, see also Weingart, Engels and Pansegrau 2002.

adaptation when international distribution of emission rights are concerned” (SRU 2002: §74; author’s translation).⁷⁷

In (global) sustainable development policy mainly three ministries have a decisive role: environment, economy and economic cooperation (with developing countries). All of them support the idea of a special responsibility of industrialized countries to curb CO₂ emissions and support developing countries in their efforts to enter the road to sustainable development. While the Ministry of the Environment mainly highlights the global ecological and national economic benefits of such a policy, the Ministry of Economy, as a rule, supports this policy as long as it does not lead to negative competition effects for Germany’s business sector. It is mainly the Ministry of Economic Cooperation that emphasizes the general moral duty of Germany to reduce CO₂ emissions and to support vulnerable countries—although not neglecting to point out positive long-term economic and security effects for Germany. The ‘interior’ equity consequences of CO₂ reduction policies are most explicitly thematized by the Ministry of Economy, yet in a biased way by pointing at negative economic effects on individual industries and not mentioning effects on various social groups.⁷⁸ With respect to the consequences inside Germany, the environmental ministry (as well as the Ministry of Economic Cooperation) is much less specific.⁷⁹ Usually it points at the general benefits of an ecology-driven innovation policy and, more specifically, at the potential increase in exports and employment in business sectors related to energy saving. Social distributional effects of global environmental commitments are

77 In spite of this cautious hint to the responsibilities of developing countries to contribute to global CO₂ reductions, the SRU explicitly supports a progressive climate policy, characterizing the requirements of the Kyoto Protocol as a first step into a reduction policy with more demanding goals (SRU 2002: §74).

78 The EU-funded research project ‘Environmental Policy, Social Exclusion and Climate Change—EPSECC’ investigated for Germany, Greece, Switzerland and UK whether policies aiming at mitigating global climate change could be made more efficient and fair if policy measures were adjusted to the specific living conditions, needs and capabilities of socially excluded or weak groups. The general result of the study was that a socially differentiated (‘targeted’) climate protection policy could even contribute to the integration of these groups; this would entail a complex, long-term policy of empowerment. Concrete climate change policies, however, have been designed so far—the study was completed in 1999—almost without any consideration of social aspects (*Umwelt*, BMU, No. 10/2000, pp. 520-521; see also Umweltbundesamt: R & D Project No. 296 41 125 and <http://www.warwick.ac.uk/PAIS/epsecc/descript.htm>).

79 This also holds true for the German government’s contribution to the International Conference for Renewable Energies in Bonn, see BMU and BMZ 2004.

rarely discussed in detail.⁸⁰ This was (indirectly) done most specifically in the case of the eco-tax⁸¹ and with respect to some regulations concerning energy saving. It was, for instance, announced that the amendment of the Renewable Energy Law limits additional costs at € 1.10 per month for private electricity consumers (*Umwelt*, BMU, No. 12/2003: 649).⁸² On a general level a lot of discussion is concerned with the economic and sectoral effects of the CO₂ emission trading system, but much less with social-distributional effects.

(2) Economic interest groups

Reference to national equity concerns is made frequently to ward off anticipated disadvantages for certain sectors or branches in national and international competition. Aspects of social distributional fairness inside Germany are discussed neither by traditional associations nor by those representing 'green' enterprises. National (social) equity arguments are most frequently used by the coal sector and related industries. They refer to the great importance of this sector for a stable and secure national energy supply (especially after the decision to phase out nuclear energy), the (high and increasing) export of German coal mining and utility technologies,⁸³ and the threat of losing jobs.⁸⁴ This industry is not only heavily subsidized⁸⁵ but also enjoys preferential rules with respect to the eco-tax. Due to its strong political influence, it remains more or less spared from CO₂ reduction regulations,

80 An analysis on the basis of various studies on the socioeconomic effects of climate change policy came to the result that more or less positive macro-economic effects could be expected if additional investments in measures/technologies to raise energy efficiency were made. In balance, the effects would be clearly positive if the assessment was to take further aspects into consideration, such as decrease of negative external effects, stimulation of technological innovation, first-mover advantage, etc. (BMU 2000c: 34-36, 42-49).

81 For general information, see <<http://www.foes.de>>.

82 The already mentioned RWI study estimates additional costs per average household of at least € 2 per month (*Wirtschaftswoche*, No. 16, 8 April 2004, p. 26). The total savings for the country (including avoided health damages, harvest losses, etc.) resulting from this policy instrument are calculated to amount to € 2.4 billion in 2001, i.e., about € 65 per household and year (UBA 2002a: 8).

83 "Germany's pioneering role is due to the territorial unity of mining and the associated exploitation technologies" (RNE 2003: 37). The share of German mining technology in the world market is about 30 percent; the mining machine industry has about 12,000 employees (2001); the mining sector itself about 66,700 employees.

84 For a comprehensive discussion of the German coal industry see Rat für Nachhaltige Entwicklung 2003.

85 In 2003, government subventions of hard coal were € 2.7 billion.

although it is just the CO₂ emissions from this sector that make it highly unlikely that Germany will reach the national reduction target.

(3) Trade Unions

They use almost the same arguments as economic interest groups. However, among all actor groups they put the greatest emphasis on potential ‘loser’ sectors—especially the coal mining industry—and detrimental socioeconomic consequences of climate policy inside Germany, in particular, loss of jobs and negative distributional effects for workers and the weaker social groups. This is often combined with demands on the government to mitigate these effects with just transition policies (cf. Beisheim 2004: 174 ff.; DIW, WI and WZB 2000).

(4) Environmental Non-Governmental Organizations (ENGOS)

Aside from some small ‘radical’ (but politically almost non-influential) and Third World organizations, the mainstream usually does not ‘overstretch’ the equity issue in favor of global fairness, but they also do not bring up the tensions between global and national fairness. However, they often point at socio-ecological inequities inside Germany resulting from existing environmental policies (favoring, in their opinion, industrial interests).⁸⁶ The transnational and global players among ENGOS (see, for example, GERMAN-WATCH, Climate Alliance) strongly support the idea of global equity at the global governance level, again without addressing its distributional effects at the national level. By the way, this loose or lacking connection with country affairs contributes to the increasing criticism of lacking accountability, responsiveness and legitimacy of NGO involvement (especially of international and transnational NGOs) in global governance (Beisheim 2004, Ottaway 2001).

(5) National Bodies

Neither the Council for Sustainable Development (RNE) nor the German Advisory Council on Global Environmental Change (WBGU)⁸⁷ published

⁸⁶ In spite of this criticism, Germany has no (country-wide) ‘environmental justice movement’ (see Rehbinder 2004; Maschewsky 2001).

⁸⁷ Wissenschaftlicher Beirat Globale Umweltveränderungen (WBGU).

studies or statements on the consequences of global climate policy for national equity. Even in its special report of 2002 (WBGU 2002), in which WBGU recommended a charge on the use of global commons (especially for the use of airspace by aviation and the use of oceans by shipping), and in its recommendations concerning the international conference 'Renewables 2004' (WBGU 2004a), the distributional effects were rarely discussed.⁸⁸ Comparing the two councils, it seems that the Council for Sustainable Development (RNE) considers national equity effects of globally oriented policies slightly more than the WBGU Advisory Council. This can be most clearly deduced from its proposals concerning guidelines for a modern coal policy. Although RNE is a proponent of an even more progressive climate policy by the federal government,⁸⁹ its proposals concerning structural changes in the coal-mining sector (with respect to progress in climate policies the most problematic area in Germany) are quite moderate. This, however, can be attributed only partly to (national) equity concerns; political-pragmatic aspects concerning the chances to implement structural changes in a politically still rather powerful sector seem to play a bigger role here (cf. RNE 2003).⁹⁰

(6) Political Parties

All political parties represented in the Bundestag acknowledge, in principle, the duty of industrialized countries to reduce CO₂ emissions and to support

88 In its study on the fight against poverty with the help of environmental protection policy (published in October 2004), the WBGU recommends to oblige the industrial countries to pay adequate compensation for their contribution to climate damages based on their emissions since 1990. The WBGU considers it a priority goal of the world community to reduce the massive disparities in the distribution of wealth. It also points at the positive effects efforts to alleviate poverty and to protect global public goods have for the industrial world (e.g., opening of new markets, reducing the danger of 'environmental refugees'). The WBGU estimates that about US \$400 billion per year in support of developing countries would suffice to reach the goals of protecting biodiversity and coping with the climate challenge (the cost of fighting poverty are not included); according to the WBGU the international community should be able to cover expenditures at this level (WBGU 2004b). The publications of the WBGU are available in German and English: <<http://www.wbgu.de>>.

89 "The German Government should make further efforts to enforce the Kyoto Protocol. The German Government is encouraged to make intensive efforts to cut greenhouse gases by 40 percent nationally, and by 30 percent Europe-wide by 2020. For reasons of climate protection, however, it would appear necessary in the long-term to achieve emission cuts of 70 to 80 percent in the industrialised nations. Threshold and perhaps even developing countries should therefore be involved with initial obligations" (RNE 2003: 52-53).

90 The rather noncommittal attitude of the SRU towards equity issues has been already mentioned. The recently (March 2004) established Parliamentary Advisory Council on Sustainability (Parlamentarischer Beirat Nachhaltigkeit) has not yet published a statement on these issues.

developing countries. When it comes down to Germany's obligations in this area, one can say that the impetus of commitments is strongest in the Green Party and decreases in the following order: Social-Democratic Party (SPD), Conservatives (CDU/CSU), Liberals (FDP). However, with the exception of the Greens, questions of *global* equity play only a minor role in the discourses of the various political parties. Mainly discussed are (potential) economic effects of policy instruments and international commitments on certain business sectors and not equity issues as such. In discussions on national equity issues, the Greens (like many NGOs) take a particularly ambivalent stance. On the one hand, of all political parties they criticize most strongly tendencies of 'environmental injustice' in domestic environmental policy while, on the other hand, they—as all others—largely ignore equity problems that might ensue for Germany as a consequence of global climate protection and sustainable development policy.

(7) Public Media

As applies for all other relevant social and political actor groups, domestic equity issues play only a very marginal role in the public media. There has been no real public discourse on these issues.⁹¹ While the discussion on possible climate change consequences is broadly reported and the need for more stringent mitigation activities is generally acknowledged, with respect to concrete German climate policy, the focus is mainly on positive and negative effects for the economic sector.

4.2 The Equity Issue in Local Agenda 21 Activities

About 2470 local communities were or are engaged in a Local Agenda 21 (LA 21) process.⁹² The following statements are based on the analysis of various surveys (e.g., three surveys by Difu of 1996, 1997, and 1998; by ICLEI 2002;

91 The discussion on 'environmental justice,' which is particularly pronounced in the USA, is almost non-existent in the German media. In general, the number of reports on environmental matters (weekly and monthly magazines) decreased in 2003, the main focus being instead on energy and climate related topics (see *iwd* No. 6, 2 February 2004: 'Umweltpresse 2003')

92 These local authorities formally decided to establish LA 21s; so far, only about 150 LA 21s have been prepared and 'enacted.' However, the real picture is more complicated: many local communities are engaged in SD-related activities without using the LA 21 label, and not all of the local communities having formally decided to establish an LA 21 program are still busy in this area.

and by Servicestelle/InWent 2003 as well as surveys conducted by state agencies⁹³) and studies (e.g., UBA 2002a, 2002b, and studies by Difu/ICLEI and IFEU/BKR; see also <<http://www.iclei.org/la21survey>>; Rösler/Trapp 2000).⁹⁴

- The main focus of LA 21 activities is on environmental problems within the local area (see also Servicestelle Kommunen in der Einen Welt 2002: 32).
- Among environmental protection activities the issues of climate protection as well as energy and transport (including reduction of energy and resource consumption) dominate.⁹⁵
- Activities with a systematic focus on developing countries play, if at all, only a marginal role.⁹⁶
- Most climate-policy related activities are guided by local public interests rather than a true global perspective; global justice considerations are almost entirely excluded (see also UBA 2002a: 50-51).
- The idea of SD is frequently interpreted as promotion of 'local public interest' (UBA 2002a: 179); and there is a strong tendency to put im-

93 For example, Bavaria (<<http://www.agenda21.bayern.de>>; (<<http://www.bayern.de/lfu/komma21>>) and Baden-Württemberg (<http://www.lfu.badenwuerttemberg.de/lfu/abt2/agenda/index.html>>). See also <<http://www.fh-erfurt.de/vt/projekte/la21/projekt.htm>>.

94 The analysis was supplemented by telephone interviews with relevant researchers of Difu and ICLEI. There is no special study focusing on equity and equity-related aspects, and, according to the interviewees, no such study is planned in the foreseeable future.

95 Local community activities and opportunities concerning renewable energies are described in 'Erneuerbare Energien für die Kommunen. Handlungsbedarf, Chancen und Good-Practice-Beispiele' (see <<http://www.forumue.de/forumaktuell/publikationen/00000066.html>>). At the Municipal Leaders Conference on Renewable Energies ('Local Renewables 2004'), which took place shortly before the 'Renewables 2004' Conference in Bonn, mayors and representatives of cities and municipalities of the world adopted a 'Local Governments' Renewables Declaration' on May 31. In this declaration they committed themselves, *inter alia*, to promote renewable energies in their regions, giving special consideration to the needs of developing countries and the poor. The declaration explicitly states: "We will take global equity and the global impacts of local policy into consideration, and work in partnership with cities and local communities in other parts of the world." With respect to sustainability the signatories declare, *inter alia*, "We will take social and health aspects into consideration, ensure the participation of our citizens, address equity and gender aspects, and seek to link our energy policies with poverty alleviation. ... We will take economic aspects into consideration, prioritise cost-effective solutions ... and combine our energy policies with regional economic development and job creation."

96 An analysis of LA 21 activities in Bavaria—one of the most active states in this area—comes, *inter alia*, to the conclusion that although climate protection is one of the most popular issues, 'one world' and 'global justice' issues play only a marginal role. A general trend of decreasing participation in LA 21 activities is observed (Bayerisches Staatsministerium für Umwelt, Gesundheit und Verbraucherschutz 2004).

provement of the living conditions in one's own (rich) country at the center of local SD activities (UBA 2002a: 4).

- Even in so-called One World Activities (established by 78 percent of the local communities participating in LA 21 processes), *equity concerns* are addressed mostly in the conventional way implying a moral obligation to support developing countries.⁹⁷ However, there frequently are activities directly supporting various groups, organizations, villages, etc. in Third World countries, such as charity markets, donation campaigns, fair-trade shops, city partnerships, direct support of developmental or humanitarian projects, etc. Among the German states North Rhine-Westphalia takes the lead when it comes to considering global perspectives. This may have been caused by the great emphasis the North Rhine-Westphalian government put on global issues in its support of LA 21 activities and its State Agenda 21 process.

The analysis of LA activities in climate policy with a focus on equity issues leads to the conclusions that

- the principle of global fairness in climate policy is not contested but rarely informs concrete climate/energy-related activities;
- the distributional effects of a climate policy focused on the needs of 'the South' *within* the local community are not thematized;
- the main driving force in climate policy activities is 'local self-interest'.⁹⁸

From a political-strategic perspective, the analysis suggests the following conclusion: A political campaign addressing and demonstrating the (socio-economic) distributional effects of a climate policy based on global fairness standards could lead to an erosion of the still rather strong commitment of

97 This statement does not intend to belittle the strong commitment of local actors in actual support of developing countries. Their efforts are all the more to be praised because the social and economic problems of local communities have become more severe over recent years due to the economic crisis, reduced local tax revenue and financial transfers by the state governments as well as additional (obligatory) tasks imposed on them by the federal government, and their diminishing influence on some relevant emitters due to the liberalized energy market (e.g., public utilities) (see Kopatz 2003; see also the restriction analysis for local "One World" activities in the Inwent newsletter, Dialog Global, No. 3/2003, which also points out decreasing participation, motivation and political support as well as lacking personal resources).

98 See also the critical evaluation of a German LA 21 process (in the city of Munster) by an expert group from Latin America that drew conclusions like "the aspect of global responsibility did not play any role in the LA process" (p. 6); projects such as the energy saving program "did not surpass the narrow local perspective" (p. 24); cf. Institut für Theologie und Politik 2002).

the public to a progressive national climate policy. From this also follows: as long as the population believes in a win-win constellation—meaning that the direct (e.g., subsidies for energy saving measures) and indirect positive effects (e.g., increasing employment,⁹⁹ modernization of economy, amenity, health, life expectancy, other welfare gains and avoided defensive costs such as expenditures for flood protection) of the national climate policy will predominate—they will also accept and support the idea of strict global standards of justice, implying Germany’s responsibility to be among the leaders in global climate policy.

To conclude, all actor groups and the public share the following characteristics:

- General acceptance of the universal (abstract) principle of international justice as the guiding principle of climate policy, however
- the equity principle is rarely specified with respect to which element of justice it refers to: equality, needs, compensation, or a combination of elements. This vagueness provides flexibility in the political debate and public discourse, and in international negotiations;
- equity *intra muros*, i.e., inside Germany (as affected by the global/universal principles, international and national commitments, and various national policy programs to curb climate-relevant emissions) is rarely discussed and poorly investigated (i.e., according to ‘burden per capita,’ differentiated by socioeconomic criteria);
- there is not any leading paradigm structuring consistently the programmatic arguments of various groups with respect to equity: (1) the SD concept is accepted by all groups, however, it is a vague and evolving concept with different meanings, depending on the version preferred; and according to the requirement to give equal consideration to environmental, social, and economic concerns it rather complicates equity-related decisions than facilitating them; (2) the EM concept treats equity generally as an outcome category and not as a guiding objective of environmental policy measures; in concrete policy-making equity concerns are treated from the perspective of ‘enlightened oppor-

99 A recent study (2004) estimates that renewable energy policy has created about 118,700 jobs, an increase of 52,100 compared to 1998 (Umwelt/BMU No. 6/2004: 333). However, there are studies that challenge these results as being too optimistic. They criticize, for instance, the neglect of so-called negative budget effects caused by rather high subventions for renewable energy. It is claimed that the total employment effects could, in balance, be even negative (Pfaffenberger, Nguyen and Gabriel 2003).

tunism,' i.e., as a restriction to be aware of in developing and implementing EM policy strategies; (3) the idea of public interest (*bonum commune*), in its present form, obviously strengthens *intra muros* equity concerns but widely neglects *extra muros* (global) equity concerns. Although this bias is challenged increasingly, (national) public interest remains the meta-norm in the public discourse for legitimization of public policies and system performance, especially for the distribution of costs and benefits and the acceptance of individual burdens for the sake of 'others.'

5. Discussion

In Germany, there is a rather broad consensus among the relevant actor groups and the general public that highly industrialized countries have a moral obligation to take a lead in policies coping with global climate change, to take the costs of these efforts, to support developing countries in adapting to or mitigating negative climate change consequences, to allow them a due development process, and to grant them fair access to the international process of decision making on climate change policy.

This consensus is based on the widely shared beliefs that

- climate change is already taking place, which will result in one of the greatest global challenges to mankind in the foreseeable future;
- anthropogenic emission of greenhouse gases (esp. CO₂) is the major driving force behind climate change;
- the increased concentrations of GHGs (greenhouse gases) in the atmosphere are mainly the result of historical and current emissions of developed countries;
- in a global perspective the effects of climate change will, in balance, be negative and the majority of negative impacts will happen in developing countries;
- developed countries have sufficient mitigation capacity (technical know-how, financial resources, etc.), while the developing countries have little or no capacity to confront the challenges of climate change;
- the atmosphere is a global common good and therefore there must be a fair and equity-based principle of sharing this good.

The acknowledgment that developed countries bear responsibility for climate change results in the acceptance of a principal duty to support the develop-

ing world with respect to the costs of damages, adaptations and measures to mitigate climate change. However, although the principle of equal per capita emission 'rights' of all countries is increasingly accepted, there is no clear-cut acceptance of, or even support for, a compensation formula based on that principle. There also exists no public discourse about this special issue of global justice. The discourse on Germany's responsibility toward developing countries did not go beyond a more or less vague acceptance of a general moral duty to contribute actively and progressively to an effective global climate change policy, ensuring Germany's place among the forerunner countries. This notion of moral duty embraces not only active support for developing countries by various means¹⁰⁰ but also the tendency to refrain from requiring these countries to reduce their GHG emissions. It was only recently that, in preparation for COP 10 in Buenos Aires, the necessity of GHG reductions by *large* developing countries with a fast-growing economy was mentioned by the German government—emphasizing at the same time the need of more and drastic emissions reductions in industrial countries (*Umwelt*, BMU Nos. 7-8, 2004, p. 414).

According to Ikeme (2003), the North and the South act on different conceptions of equity and environmental justice in confronting the issue of climate change: "The focus of the South has been on equality, distributive injustice and corrective justice for historical emissions ... The North, on the other hand, focuses mainly on the most economically efficient path for minimizing climate impact and delivering global ecological health and stability ... This has resulted in the North and the South broadly subscribing to opposing burden sharing formulas. It is commonly recognized that equal rights per capita entitlements is the most favored allocation option by the South, while the grandfathering rule is generally preferred by most countries of the North ..." (Ikeme 2003: 200). Germany's position is somewhere in between these two different conceptions: an 'ecological debt' and the idea of equal rights to the assimilative capacity of the atmosphere is accepted, but it is left open how far this historical (and continuing) burden should be transformed with concrete measures of corrective and compensatory justice. This ambiguous position, which—except for some few actor groups—is broadly shared by the

100 In German climate change policy the main focus is on promotion of renewable energies combined with enhanced energy efficiency (cf. *Umwelt*, BMU, Nos. 7-8, 2004, pp. 398-410).

German public, provides both the stimulus and the legitimization for engaging in progressive (compared to many other industrialized countries) international climate-related activities by the German government.

Would the Germans, by and large, be prepared to accept more demanding duties and corresponding policy objectives than the government is planning? Is there a larger reservoir of ‘good will’ to carry the burden of global climate policies than the government assumes to exist? The answer is not easy because the analysis of the various surveys and LA 21 activities (see section 4) demonstrates that the attitudes and behavior of the public and the majority of relevant actor groups are also characterized by ambiguity with respect to climate-related mitigation and adaptation policy. While only 35 percent (2004 survey) of the public were satisfied with the role Germany played in international climate negotiations and almost 56 percent of the sample would like to see Germany in Europe take the leadership in global climate policy, the issue of improving environmental policy in developing countries ranked very low, and the willingness to accept additional personal burdens for the sake of environmental improvements has dropped compared to previous years. Furthermore, less than half of the Germans (48 percent) would accept higher taxes in favor of environmental protection measures.¹⁰¹ This feature—high approval of fair and strict climate change policies in general combined with rather strong rejection of corresponding measures and their ensuing financial burdens—is systematically reflected in the other items of the various representative surveys analyzed in section 4.

The analysis of LA 21 activities—in which, as a rule, citizens with a relatively high interest in sustainability issues participate—revealed a quite similar picture: Climate protection ranks high in both general consent and concrete activities. However, most of the activities are guided by *local* public interests.¹⁰² Activities focusing systematically on developing countries play only a marginal role and equity concerns are addressed mostly in a symbolic manner of acknowledging a moral obligation to support these countries.

101 Nine percent of the public would be “very much prepared” and 39 percent would be “rather prepared” to accept higher taxes; 21 percent clearly reject this idea and 31 percent would rather reject higher taxes (BMU 2004).

102 See also the detailed analysis of LA 21 activities in 17 local communities, which also confirmed that instead of a true global perspective local public interests are dominant (UBA 2002b: 27).

Thus, the results of the analysis of public attitudes and activities suggest that a broad majority of the Germans would not *agree with* or actively support a more demanding governmental policy towards global equity if they had to bear the additional costs themselves. This is in line with general findings of research in morals and politics that consensus on the existence of a problem or a moral obligation to act need not create consensus on which action is to be taken and when. Still, the results of the surveys do not necessarily imply that greater parts of the public would actively oppose a stronger governmental policy towards global equity. As is known from political theory, ‘diffuse support’ (cf. Easton 1965; Lipset 1981) of a political system and/or general norms may provide governments with more leeway for action as could be deduced from public attitudes towards specific issues. And, since it is highly accepted as a general moral duty that rich countries should support the poor countries, especially if the problems of poorer countries are mainly an outcome of the rich countries’ benefits, it seems reasonable to assume a rather high degree of diffuse support for (and ‘silent acceptance’ of) governmental activities even if they are not in accordance with people’s individual preferences.¹⁰³

The degree to which ethical norms in public affairs enjoy explicit and diffuse support is the result of a complex process. One of the relevant factors is certainly the anticipation of the consequences the realization of the norm at issue would have for other norms and preferences. Actors apparently make choices between consequential calculations and normative appropriateness (Hurrell 2002: 144). But which norm is really at stake when it comes to more demanding policies against global climate change? If there is more than one relevant norm, I suggest that in such a case of a norm conflict, the more fundamental norm of the set will be chosen, especially if its related consequences largely comply with actual preferences of needs of the group or the individual.¹⁰⁴

As demonstrated in section 2.2, the normative concept of ‘public interest’ plays a strong role in German politics (for legitimization of policies and their effects), especially when justice or equity issues are involved. Compared to

103 For a general discussion of the interrelationship of consensus and acceptance in politics, see Neidhardt (2000).

104 On multiple and conflicting images of justice of individuals and the problem of inclusion/exclusion of ‘others, see Montada 1997. See also Linos and West (2003); Rasinski, Smith and Zuckerbraun (1994); Noël and Thérien (1995); Rayner (1991).

global or cosmopolitan norms of justice, it is (still) much more a territorial (national) concept. It emphasizes the needs and interests of the people ‘here and now’ instead of those ‘there and later’ (of an imagined world community and future generations). Obviously, in an arising conflict between the two types of norms, the ‘public interest’ will still be the decisive one in the public debate and for political decision making.

The still dominant role of (national) ‘public interest’ in global matters sets limits for policy approaches striving at global justice. These limits are not fixed once and for all. They are flexible depending on the public discourse and various other factors that cannot be discussed here (cf. Albrow 1996; Kersting 2000). However, it could be said that, in general, politically relevant problems of acceptance would arise if equity rules legitimized by the public interest concept were stretched too much in favor of ‘outsiders’, even if their demands were legitimized by an acknowledged global equity norm.

Is the German government approaching these limits with its global climate change policy? The results of the survey (see section 4)—indicating, *inter alia*, rather low and at the same time decreasing public support for costly policies and a weak global orientation in LA 21 activities—seem to indicate this. At least, it will become harder to get consent for additional expenditures in favor of ‘global welfare.’¹⁰⁵

But was the hitherto broad agreement with the government’s global climate policy goals actually based on a true public consent? I contend it was, at best, an *uninformed* consent. A legitimizing consent (i.e., providing legitimacy for important political measures) requires, among other things, that the actors concerned are adequately informed about the implications of their consent. In this respect, the broad approval of the government’s climate change policy is not based on a completely *informed* consensus. The public, in general, does not have the information required to assess all relevant individual and group-related consequences of climate change policy. There clearly is a great lack of information on the distributional effects of the various (also planned) policies *within* Germany.

Both the government and the proponents of a strong global climate change policy provide the public only with sparse information—especially in

105 Studies by Eichenberger and Frey (2002: 275) have shown that “... most people do not behave in a purely egoistic way. This applies especially to situations in which moral and altruistic behavior only implies low cost.”

advance—about the distributional effects of present and planned policies and commitments made in international negotiations, while plenty of information is given about potential benefits. In sharp contrast to the salient role *global* equity concerns are playing in the political discourse on climate change, the issue of equity *within* Germany is almost neglected by most of the actor groups as well as academic circles (for one of the few exceptions, see Sachs, Loske and Linz 1998).¹⁰⁶

Would there be a remarkable decline of public agreement with the government's climate change policy,¹⁰⁷ if the public had complete and adequate knowledge about the equity effects within Germany? This is a highly speculative question and therefore I will only address those factors that are supposedly relevant for this issue in a general way.

(1) Cost-Benefit Balance

In general, most climate-related policies seem to have regressive distributional effects at the national level.¹⁰⁸ Yet these effects are seemingly quite small, even in the case of the most-contested eco-tax. Moreover, the absolute

106 The little interest science takes in equity issues related to the various environmental instruments is in strong contrast to the salient role these issues played in the 1970s and 1980s. For two of the standard books of that time, see Zimmermann (1985); Schnaiberg, Watts and Zimmermann (1986); see also Knoepfel's (1986) discussion on the role of distributional issues in air quality control policies.

A recent publication by the German Association for Promoting Ecological Tax Reform (Förderverein Ökologische Steuerreform/FÖS) admits negative (regressive) effects of the eco-tax for lower income groups, but highlights the generally positive effects the eco-tax also has for socially weak groups—especially if the positive economic and ecological side-effects (reduced pollution loads, creation of new jobs) are included in the assessment (cf. <<http://www.foes-ev.de/downloads/sozialeWirkungen.pdf>>; information on the effects of the ecological tax reform on the behavior of businesses and households, based on a recent study, are available at <<http://www.ecologi.de>> and <<http://www.ecologic-events.de/oekosteuer>>; see also a study from 2001 on the effects of the ecological tax reform in Germany: *DIW-Wochenbericht*, 14/2001, pp. 220-225).

107 On the equity effects of the recently introduced CO₂ emission trading system there is not yet any detailed information available. A recent study of the Deutsches Institut für Wirtschaftsforschung (DIW) (cf. *Energie-Impulse*, No. 4/2004, pp. 1-2) points out that for the future development of energy prices not only the availability of energy resources will be decisive but maybe even more so for future climate politics and the applied policy instruments. In particular the EU emissions trading system, which for the first time establishes market-prices for CO₂ emissions, could have drastic effects on energy prices (fossil fuels). It is, for instance, estimated that with a price of € 20 per ton of CO₂ prices for hard coal and lignite would rise by a factor of two. If € 50 would have to be paid per ton of CO₂, these prices would increase by a factor of up to 4.3 (compared to a CO₂ price of zero euros). Of course, *ceteris paribus* the competitiveness of low-emission energies, such as renewable energies, would then improve enormously.

108 Taken into account are both the effects of previous policies and of the demanding goals the German government announced for the 'post-Kyoto phase' after 2012.

additional financial burden on the average household seems to have been, in monetary terms, rather small. Turning to a socioeconomic macro-perspective and including a broader set of assessment criteria, then the overall effects of German climate change policy have been obviously positive¹⁰⁹: employment figures rose; new, modern and internationally competitive business branches were established; the dependency on fossil resources was lowered and will continue to decrease; and the ecological impacts of the policies are, as a rule, much lower compared to conventional ones. Furthermore, a reduced dependency on the world energy market goes along with Germany's reduced economic-political vulnerability.¹¹⁰ All in all, Germany's climate change policy comes close to a combined win-win strategy and no-regret policy.

(2) Situational Context Variables

Although there is no clear-cut relationship between economic performance and public support for environmental policy, cross-national studies and the German case have shown that a prospering economy is, as a rule, highly supportive of a progressive environmental policy (cf. Jänicke and Weidner 1997; Weidner and Jänicke 2002). For about a decade the economic situation in Germany has been worsening, causing high unemployment and a crisis of the social security institutions: There have been deep cuts affecting the once closely knitted 'social security net.' The basic foundations of the social welfare/solidarity system are eroding—also due to the increasing political influence of neo-liberal ideology.

A large part of the population sees the macro-economic future as anything but rosy, and a general mood of 'relative deprivation' (cf. Runciman

109 Learning from past experiences may also have had an influence: The (once unique) precautionary principle (cf. Cavender-Bares, Jäger and Ell 2001) as one of the three basic principles of German environmental policy—although heavily contested by business and parts of the scientific community—in a long-term perspective proved to be a 'rational one,' avoiding environmental deterioration without hampering economic development, in some cases even creating new business opportunities. Similar benefits can be attributed to the role as pioneer or forerunner Germany played in some policy areas (especially in air pollution control) (cf. Weidner 1995).

110 Every now and then democratic-normative reasons are also used in favor of measures related to climate change policy; see for instance the statement by a member of the German parliament (Bundestag) in a debate on climate protection: "Ich finanziere doch lieber den Handwerker, der auf meinem Dach Wärmedämmung anbringt, als fundamentalistische Strukturen in Saudi-Arabien über das Begleichen meiner Ölrechnung" (*Das Parlament*, No. 50/51, 16/13 December 2004, p. 1) ("I'd rather pay the man insulating my roof than support fundamentalist structures in Saudi-Arabia by paying my oil bill"; author's translation).

1966; Gurr 1970) is spreading.¹¹¹ These developments may contribute to the declining willingness to pay for environmental protection and the growing attitude that environmental commitment should pay. Considering these developments, it seems to be a plausible inference that the willingness to contribute to global equity will also decline, if the actual (or perceived) cost-benefit balance should favor ‘the others.’

On the other hand, various national and global ecological, economic and political events of the last decade have raised the public consciousness of an ‘enlightened rationality’ seeing the benefits in contributing to a progressive global climate change policy: for instance, the steep rise in energy prices, which once again demonstrated the dependency on foreign energy resources and the vulnerability of the German economy, or the increasing frequency of extreme weather conditions which were widely believed to be a result of man-made climate change.

Actually none of these contradictory developments seems to have a dominant influence on the public attitude towards climate change policy. However, the results of the analysis of public surveys on environmental policy and of LA 21 activities seem to indicate that the worsening socioeconomic situation leads to a more prominent position of equity concerns within Germany at the expense of equity issues and fair burden-sharing among countries. In short: there still is a broad support of progressive climate change policy (and no denial of a moral obligation to support developing countries) but the willingness to bear *individually* additional costs for such a policy is declining rather strongly.

(3) Welfare State Model

In the past decade Germany has been pushing for a more progressive global climate change policy than many other industrial countries. The majority of the population not only accepted the government’s policy but even expected from them to do more at home and abroad. The central preconditions for this

111 The recent ‘Data Report 2004’ (Statistisches Bundesamt 2004) on the development of living conditions, structural changes and the subjective well-being of the Germans comes to an overall negative assessment of current trends: There has not only been an increase of the so-called poverty quota since 2002 but also a rise in the inequity quota (measured by the gini index), i.e., the asymmetries in income distribution have increased. These trends in the deterioration of living conditions contribute to the (monitored) decline of subjectively perceived well-being among Germans in recent times.

support were widespread and mutually shared beliefs that there is indeed a man-made climate challenge and that the highly developed countries should take on most of the burden to mitigate it. The public surveys indicate that there is a broad (indirect) consent to the articles and programmatic statements dealing with these aspect in the UNFCCC of 1992 (especially articles 3.1 and 3.2), the Berlin Mandate adopted by the first Conference of the Parties (COP-1) to the UNFCCC in spring 1995 (especially article 2(a)), the Kyoto Protocol of 1997, and—although weaker and on a much less well-informed basis—the European Community’s Triptique Approach to burden-sharing among the EU member states.¹¹²

The broad approval of fair global burden-sharing on the basis of equal per capita rights to the common good ‘atmosphere’ could be traced back to norms, values and beliefs rooted in the welfare state (including social market economy) as a model of social order and integration (cf. Alber 2001; Esping-Anderson 1990).

The German welfare state model is a system in which the government assumes the main responsibility for providing basic social and economic security for the state’s population. Among its core norms are: the elimination of ‘unfair’ inequalities by way of distributional and re-distributional policies, the provision of equal opportunities and the support of those who have not been able to achieve a certain standard of living on their own. Thus, re-distribution of income and wealth, guided by the maxims of social solidarity, public interest and democratic capability, are highly internalized by the Germans, although the growing ‘crisis’ of the welfare state and the pressure exerted by ‘globalization’ on established institutions has furthered the influence of neo-liberal ideology, and especially since the 1990s discernible shifts towards retrenchment and restructuring of the welfare system (though not its abolishment) have taken place.¹¹³ However, as an ‘idea’ it still plays an important role in political conflicts and the public discourse, and so do the norms and values associated with this model (cf. Alber 2001: 97 ff.). One of the core principles—the idea that the privileged people bear responsibility for

112 For the content of the various international agreements mentioned, see Ringius, Torvanger and Underdal (2002), especially pp. 13 ff.

113 For a broad and in-depth discussion of the current challenges to the preconditions and norms of (global and national) solidarity see the various relevant contributions (especially by Münkler, Offe, Kaufmann, van den Daele, Döbert, Habermas, Stichweh and Berger) in Beckert et al. (2004); see also Streeck (2001).

the (socioeconomically) weak—is deeply internalized. Together with other norms of the national welfare model it seems to be decisive in structuring the average attitudes of the population towards the various types of strategies that can be taken to solve global environmental problems.¹¹⁴

Equity, to conclude, is a highly acclaimed and deeply engrained value in the German society, from which follows that there is a very broad consensus that equity should also guide policies concerned with the global commons. However, as yet it has not reached the standing of a true (‘thick’) universal norm, independent of changing context conditions affecting the allocation of costs at home. Apparently, the willingness to support additional globally oriented policies starts to drop rather rapidly once a certain degree of individual cost burden has been reached. This threshold value is not fixed and not solely defined in monetary terms: it is made up of a variety of interrelated factors, such as an assessment of the seriousness of the problem and the potential costs and benefits of mitigation policies; the current individual state of welfare and its future prospects; a sense of general moral obligation to contribute to problem-solving efforts; the perception of fairness of burden sharing implied by governmental global climate policy; ¹¹⁵ characteristics of the public discourse on the issue, and; expectations about ‘reciprocity,’ i.e., assumptions about the future attitude and behavior of the recipient (‘benefiting’) countries.

The analysis of public opinion surveys and LA 21 activities suggest a factor constellation, in which the (shifting) threshold value may already have been reached, at least the mobilizing and legitimating power of the ‘moral factors’ has lost momentum. Consequently, if the government wants to increase significantly its commitment to global climate change policy, it will have to prove more than in former times that its policy will also increase

114 Harris (2004: 255) found in his study that “... the Europeans have generally been more generous than the Americans are in helping the world’s poor, much as they are more generous in helping their own poor.” This proposition is supported by findings of cross-cultural research on the relationship of the design of the social system and the degree of support for re-distribution policy. The strongest support for a governmental equality policy exists in the well-established Scandinavian welfare states, the weakest in Anglo-American countries. Germany ranks in between. Moreover, the social systems vary considerably when it comes to acknowledging the legitimacy of inequality. U.S. citizens, for instance accept much higher income differences as being adequate (fair) than Scandinavians or Germans (cf. Alber 2001: 93; see also Liebig and Wegener 1995).

115 See Ringius, Tovanger and Underdal (2002) for a general discussion of the role of fairness principles in global climate change policy; see also Albin (1993) on the role of different fairness concepts in negotiation.

individual and public welfare within Germany. From this follows that the regressive distributional effects of climate policies will increasingly become critical information, weakening the leverage of proponents of a more forceful global climate change policy. Therefore, it seems to be plausible that neither the current ('red-green') government nor environmental NGOs will set the issue of *equity within Germany* on the political agenda. This assumption seems to hold if one considers that up to now they have not thematized national equity effects of climate policy in any way that is worth mentioning. Instead, they have strongly emphasized the great benefits of climate policy for the environment, the economy at large and political security—all of which are objectives that are more fundamental to the concept of ecological modernization than that of sustainable development.¹¹⁶

In a balancing view, the German government's morally ambiguous climate change policy has succeeded so far in combining both, global and national 'rationality': With its strong commitment for a globally concerted policy of targeting the industrial countries' greenhouse gas emissions, based on a SD rhetoric, the government effectively contributes to the creation of a global governance system that includes developing countries—a precondition for the regime's long-term success. Furthermore, the government's proactive and pioneering role increases its possibilities to shape the regime's design in a way that is compatible with the national political strategy. This strategy, which is guided by the EM concept, strives at the promotion of the national public interest thereby allowing for legitimacy and public support. Whether the strategy will be successful will largely depend on the development of a workable global regime that gives room for Germany's (EM) policies. Thus, both levels are highly interdependent, and it depends on the government's skill to balance partly contradictory demands. So far, it has been rather successful. After Russia ratified the Kyoto Protocol in November 2004, there were a sufficient number of major CO₂ emitting signatories for the agreement to become legally binding for all signatory states as of February 16, 2005 despite the adamant resistance of the U.S. government to the agreement. This means that the prospects of a continuous rise of demand for energy-

116 Lafferty and Meadowcroft (2000: 453) came to the conclusion that in Germany there is no "hegemonic discourse". This finding holds true for the rhetoric and programmatic level that is characterized by a mix of both discourses (the SD and the EM discourse). However, the concrete policies and the public attitudes with respect to climate change policy clearly show the preponderance of the ecological modernization concept.

saving and efficiency-increasing technologies in the world market will improve further. Within Germany, a structural change towards a climate-sensitive energy policy has been adopted at rather low social cost and with quite high public acceptance. Yet, whether these favorable conditions will prevail, depends much more than before on the government's ability to manage the equity issue within Germany which will definitely grow in importance.

References

- Alber, J. (2001): 'Hat sich der Wohlfahrtsstaat als soziale Ordnung bewährt?' In: K. U. Mayer (ed.), *Die beste aller Welten? Marktliberalismus versus Wohlfahrtsstaat. Eine Kontroverse*. Frankfurt am Main and New York: Campus, pp. 59-112.
- Albin, C. (1993): 'The Role of Fairness in Negotiation.' In: *Negotiation Journal* 9 (3), pp. 223-244.
- Albin, C. (2003): 'Getting to Fairness: Negotiations over Global Public Goods.' In: I. Kaul, P. Conceição, K. Le Goulven, and R. U. Mendoza (eds.), *Providing Global Public Goods. Managing Globalization*. New York, Oxford: Oxford University Press, pp. 263-279.
- Albrow, M. (1996): *The Global Age: State and Society beyond Modernity*. Cambridge, UK: Polity Press.
- Albrow, M. (1998): *Abschied vom Nationalstaat*. Frankfurt am Main: Suhrkamp.
- Andersen, M. S. and Massa, I. (2000): 'Ecological modernization—origins, dilemmas and future directions.' In: *Journal of Environmental Policy & Planning* 2 (4), pp. 337-345.
- Babiker, M., Eckaus, R. (2000): Rethinking the Kyoto Emission Targets. Report 65, MIT Joint Program on the Science and Policy of Global Change. Cambridge, MA: MIT.
- Ballestrem, K. (ed.) (2001): *Internationale Gerechtigkeit*. Opladen: Leske + Budrich.
- Barry, B. (1991): *Liberty and Justice*. Oxford: Clarendon.
- Bayerisches Staatsministerium für Umwelt, Gesundheit und Verbraucherschutz (2004): Befragung zur Kommunalen Agenda 21. Ergebnisse, Standpunkte und Schlussfolgerungen aus der Evaluierung 2002/2003. Munich: Bayerisches Staatsministerium für UGV.
- Beckert, J., Eckert, J., Kohli, M. and Streeck, W. (eds.) (2004): *Transnationale Solidarität. Chance und Grenzen*. Frankfurt am Main and New York: Campus.
- Beisheim, M. (2004): *Fit für Global Governance? Transnationale Interessengruppenaktivitäten als Demokratisierungspotential—am Beispiel Klimapolitik*. Opladen: Leske + Budrich.
- Beuermann, C. (2000): 'Germany: Regulation and the Precautionary Principle.' In: W. M. Lafferty and J. Meadowcroft (eds.) (2000): *Implementing Sustainable Development. Strategies and Initiatives in High Consumption Societies*. Oxford: Oxford University Press, pp. 85-111.
- Beuermann, C. and Jäger, J. (1996): 'Climate Change Policy in Germany: How Long will any Double Dividend Last?' In: T. O'Riordan and J. Jäger (eds.), *Politics of Climate Change: A European Perspective*. London: Routledge, pp. 186-227.
- Blümling, S. (2000): *Kommunaler Klimaschutz in Deutschland*. Hamburg: Dr. Kovač.

- BMU (Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit) (1994): Umwelt 1994. Politik für eine nachhaltige, umweltgerechte Entwicklung. Bonn: BMU (Drucksache 12/8451).
- BMU (Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit) (2000a): Aus Verantwortung für die Zukunft. Umweltpolitik als globale Herausforderung. Bonn: BMU.
- BMU (Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit) (2000b): Umweltbewußtsein in Deutschland 2000. Ergebnisse einer repräsentativen Bevölkerungsumfrage. Berlin: BMU.
- BMU (Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit) (2000c): Ökonomische Effekte der Klimaschutzpolitik—Diskussion und Bewertung der Kosten und Nutzen. Berlin: BMU.
- BMU (Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit) (2002a): *German Environmental Report 2002*. Berlin: BMU.
- BMU (Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit) (2002b): *Umweltbewußtsein in Deutschland 2002. Ergebnisse einer repräsentativen Bevölkerungsumfrage*. Berlin: BMU.
- BMU (Bundesminister für Umwelt, Naturschutz und Reaktorsicherheit) (2003): Erneuerbare Energien in Zahlen. Berlin: BMU.
- BMU (Bundesminister für Umwelt, Naturschutz und Reaktorsicherheit) (2004): Umweltbewusstsein in Deutschland 2004. Ergebnisse einer repräsentativen Bevölkerungsumfrage. Berlin: BMU.
- BMU and BMZ (Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit and Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung) (2004): renewables 2004. Conference Issue Paper, no place: BMU/BMZ.
- BMU and UBA (Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit and Umweltbundesamt) (eds.) (1999): *Lokale Agenda 21 im europäischen Vergleich*. Bonn and Berlin.
- BMU and UBA (Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit and Umweltbundesamt) (2000): Wegweiser 'Lokale Agenda 21.' Literatur, Ansprechpartner, Internetadressen. Berlin: BMU.
- BMZ (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung) (2002): Von Rio nach Johannesburg. Ausgewählte Handlungsfelder der deutschen Entwicklungspolitik seit der Konferenz von Rio de Janeiro (UCED) 1992—eine Bestandsaufnahme. Bonn: BMZ.
- Boehmer-Christiansen, S. (2003): 'Science, Equity, and the War against Carbon.' In: *Science, Technology & Human Values*, 28 (1), pp. 69-92.
- Boehmer-Christiansen, S. and Kellow, A. (2002): *International Environmental Policy: Interests and the Failure of the Kyoto Process*. Cheltenham: Edward Elgar.
- Böhringer, C., Finus, M. and Vogt, C. (2002): *Controlling Global Warming: Perspectives from Economics, Game Theory and Public Choice*. Cheltenham, UK: Edward Elgar.
- Brown, D. A. (2002): *American Heat: Ethical Problems with the United States' Response to Global Warming*. Lanham, MD: Rowman and Littlefield.
- Brunold, A. (2003): 'Nachhaltige Entwicklung als Herausforderung und Konzept einer innovativen kommunalen Außenpolitik: die Lokale Agenda 21.' In: *NORD-SÜD aktuell*, 17 (2), pp. 301-311.
- BUND (Bund für Umwelt und Naturschutz Deutschland) and Misereor (ed.) (1996): *Zukunftsfähiges Deutschland. Ein Beitrag zu einer globalen nachhaltigen Entwicklung*. Berlin, Basel etc.: Birkäuser Verlag.

- Bundesministerium des Innern (1976): *Umweltbericht '76. Fortschreibung des Umweltprogramms der Bundesregierung vom 14. Juli 1976*. Stuttgart etc.: Kohlhammer.
- Bundesregierung (1997): *Towards Sustainable Development in Germany*. Bonn: BMU.
- Bundesregierung (2002): *Perspektiven für Deutschland. Unsere Strategie für eine nachhaltige Entwicklung*. Bonn: Bundesregierung (download: <<http://www.dialog-nachhaltigkeit.de>>).
- Bundesregierung (2004): *Perspektiven für Deutschland. Unsere Strategie für eine nachhaltige Entwicklung*. Berlin: Bundesregierung (<http://www.bundesregierung.de/Anlage740735/pdf_datei.pdf>).
- Calliess, C. (2001): *Rechtsstaat und Umweltstaat—Zugleich ein Beitrag zur Grundrechtsdogmatik im Rahmen mehrpoliger Verwaltungsverhältnisse*. Tübingen: Mohr Siebeck.
- Carter, N. (2001): *The Politics of the Environment. Ideas, Activism, Policy*. Cambridge, UK: Cambridge University Press.
- Cavender-Bares, J., Jäger, J. and Ell, R. (2001): 'Developing a Precautionary Approach: Global Environmental Risk Management in Germany.' In: The Social Learning Group (eds.), *Learning to Manage Global Environmental Risks, Vol. 1*. Cambridge, MA and London, UK: MIT Press, pp. 61-91.
- Christoff, P. (1996): 'Ecological Modernization, Ecological Modernities.' In: *Environmental Politics*, 5, pp. 476-500.
- Dahinden, U. (2000): *Demokratisierung der Umweltpolitik. Ökologische Steuern im Urteil von Bürgerinnen und Bürgern*. Baden-Baden: Nomos.
- Deutscher Bundestag (1997): *Konzept Nachhaltigkeit. Fundamente für die Gesellschaft von morgen*. Zwischenbericht der Enquetekommission 'Schutz des Menschen und der Umwelt' des 13. Deutschen Bundestages. Zur Sache 1/97. Bonn: Bundestag.
- Deutscher Bundestag (ed.) (1988): *Verankerung des Umweltschutzes im Grundgesetz: Öffentliche Anhörung des Rechtsausschusses des Dt. Bundestages am 14. Oktober 1987*. Bonn.
- Diefenbacher, H. (2001): *Gerechtigkeit und Nachhaltigkeit. Zum Verhältnis von Ethik und Ökonomie*. Darmstadt: Wiss. Buchgesellschaft.
- DIW, WI and WZB (Deutsches Institut für Wirtschaftsforschung, Wuppertal-Institut für Klima, Umwelt, Energie and Wissenschaftszentrum Berlin für Sozialforschung) (2000): *Verbundprojekt 'Arbeit & Ökologie': Abschlußbericht*. Berlin and Wuppertal.
- Dodds, F. (ed.) (2000): *Earth Summit 2002. A New Deal*. London: Earthscan.
- Drechsler, H., Hilligen, W. and Neumann, F. (eds.) (1995): Stichwort 'Gemeinwohl.' In: *Gesellschaft und Staat. Lexikon der Politik*. Munich: Vahlen, pp. 331-333.
- Dworkin, R. (1983): *A Matter of Principle*. Cambridge, Mass.: Harvard University Press.
- Easton, D. (1965): *A System's Analysis of Political Life*. New York: John Wiley.
- Eckersley, R. (2004): 'Soft Law, Hard Politics and the Climate Change Treaty.' In: C. Reus-Smit (ed.), *The Politics of International Law*. Cambridge, UK: Cambridge University Press.
- Eichenberger, R. and Frey, B. S. (2002): 'Democratic Governance for a Globalized World.' In: *Kyklos* 55(2), pp. 265-88.
- Elliott, L. (2002): 'Global Environmental Governance.' In: R. Wilkinson and S. Hughes (eds.), *Global Governance. Critical Perspectives*. London, New York: Routledge, pp. 57-74.

- Elster, J. (1992): *How Institutions Allocate Scarce Goods and Necessary Burdens*. Cambridge, Mass.: Cambridge University Press.
- Esping-Anderson, G. (1990): *The Three Worlds of Welfare Capitalism*. Cambridge, UK: Polity Press
- Esty, D. C. (2001): 'A Term's Limits.' In: *Foreign Policy*, September/October, pp. 74-75.
- Fraenkel, E. (1964): *Deutschland und die westlichen Demokratien*. Stuttgart: Kohlhammer.
- Fraenkel, E. and Bracher, K. D. (eds.) (1970): *Staat und Politik*. Frankfurt am Main: Fischer.
- Franklin, J. (ed.) (1997): *Equality*. London: Institute for Public Policy Research.
- Gallopín, G. (2000): *Sustainable development society and the environment: a conceptual framework for tracking the linkages*. Stockholm: Stockholm Environment Institute.
- Gallopín, G. C. and Nilsson, M. (1998): *Unfolding Global Futures. A Context for Swedish Climate Policy?* Klimatdelegationen 4893. Stockholm: Naturvårdsverket Förlag.
- German Bundestag (ed.) (1991): *Protecting the Earth: A Status Report with Recommendations for a New Energy Policy*. Third Report of the Enquete Commission of the 11th German Bundestag, Preventive Measures to Protect the Earth's Atmosphere, Vol. II. Bonn: Deutscher Bundestag.
- Görres-Gesellschaft (ed.) (1986): *Staatslexikon. Recht, Wirtschaft, Gesellschaft*, Vol. 2. Freiburg/Basel/Wien: Herder.
- Grundmann, R. (1999): *Transnationale Umweltpolitik zum Schutz der Ozonschicht. USA und Deutschland im Vergleich*. Frankfurt am Main and New York: Campus.
- Grunenberg, H. and Kuckartz, U. (2003): *Umweltbewusstsein im Wandel*. Opladen: Leske + Budrich.
- Gurr, T. R. (1970): *Why Men Rebel*. Princeton, NJ: Harvard University Press.
- Habisch, A. (2001): 'Armut als elementare Beziehungslosigkeit.' In: K. Balleström (ed.), *Internationale Gerechtigkeit*. Opladen: Leske + Budrich, pp. 257-272.
- Hajer, M. (1995): *The Politics of Environmental Discourse. Ecological Modernization and the Policy Process*. Oxford: Oxford University Press.
- Harris, P. G. (2001): *International Equity and Global Environmental Politics: Power and Principles in U.S. Foreign Policy*. Aldershot: Ashgate.
- Harris, P. G. (2002): 'Sharing the Burdens of Environmental Change: Comparing EU and U.S. Policies.' In: *Journal of Environment & Development*, 11 (4), pp. 380-401.
- Harris, P. G. (2004): 'International Development Assistance and Burden Sharing.' In: N. Vig and M. G. Faure (eds.): *Green Giants? Environmental Policies of the United States and the European Union*. Cambridge, MA and London, UK: MIT Press, pp. 253-275.
- Hauff, V. (ed.) (1987): *Unsere gemeinsame Zukunft. Der Bericht der Weltkommission für Umwelt und Entwicklung*. Greven: Eggenkamp.
- Helm, C. and Simonis, U. E. (2001): 'Verteilungsgerechtigkeit in der Internationalen Umweltpolitik. Theoretische Fundierung und exemplarische Formulierung.' In: C. Leggewie and R. Münch (eds.), *Politik im 21. Jahrhundert*. Frankfurt am Main: Suhrkamp, pp. 211-227.
- Herring, P. (1972): 'Public Interest.' In: D. L. Stills (ed.), *International Encyclopaedia of the Social Sciences*, Vol. 13. Reprint of the 1968 edition. New York/London: Free Press, pp. 170-174.

- Hibst, P. (1991): *Utilitas publica—Gemeiner Nutzen—Gemeinwohl. Untersuchungen zur Idee eines politischen Leitbegriffs von der Antike bis zum späten Mittelalter.* Frankfurt am Main: Lang.
- Hilliges, G. (no date): 'Local Agenda 21—Foundations for a Sustainable Development?' In: anon., *Practical Work in Bremen's Development Cooperation.* No place, pp. 5-7.
- Homann, K. (1996): 'Sustainability. Politikvorgabe oder regulative Idee?' In: L. Gerken (ed.), *Ordnungspolitische Grundfragen einer Politik der Nachhaltigkeit.* Baden-Baden: Nomos, pp. 33-48.
- Huber, J. (1995): *Nachhaltige Entwicklung. Strategien für eine ökologische und soziale Erdpolitik.* Berlin: edition sigma.
- Hurrell, A. (2002): 'Norms and Ethics in International Relations.' In: W. Carlsnaes, T. Risse, B. A. Simmons (eds.), *Handbook of International Relations.* London etc.: Sage, pp. 137-154.
- ICLEI (International Council for Local Environmental Initiatives) (2002): Local Agenda 21 Report Results. Download: <http://www.iclei.org/rioplusten/survey_results.html>.
- IDARio (Interdepartementaler Ausschuss) (2001): *Politik der nachhaltigen Entwicklung in der Schweiz: Standortbestimmung und Perspektiven.* Zürich: IDARio.
- Institut für Theologie und Politik (ed.) (2002): *Veränderungen müssen im Norden beginnen. ExpertInnen aus Lateinamerika untersuchen den Lokale Agenda-Prozess in Münster/ Westfalen.* Münster: Institut für Theologie und Politik.
- IFOK (Institut für Organisationskommunikation) (2004): Momentaufnahme Nachhaltigkeit und Gesellschaft. Entwurfssfassung für den Rat für Nachhaltige Entwicklung vom 4. März 2004. Bensheim/Berlin: IFOK.
- Ikeme, J. (2003): 'Equity, Environmental Justice and Sustainability: Incomplete Approaches in Climate Change Politics.' In: *Global Environmental Change* 13, pp. 195-206.
- IPCC (Intergovernmental Panel on Climate Change) (2001a): *Third Assessment Report of Working Group I: Summary for Policymakers.* www.ipcc.ch
- IPCC (Intergovernmental Panel on Climate Change) (2001b): *Climate Change 2001. Third Assessment Report. Synthesis Report.* Cambridge.
- Jänicke, M. (1984): Umweltpolitische Prävention als ökologische Modernisierung und Strukturpolitik. WZB discussion paper IIUG dp 84-1, Berlin: Wissenschaftszentrum Berlin für Sozialforschung.
- Jänicke, M. (2000): Ökologische Modernisierung als Innovation und Diffusion in Politik und Technik: Möglichkeiten und Grenzen eines Konzepts. FFU-report 00-01, Freie Universität Berlin. Berlin: Forschungsstelle für Umweltpolitik.
- Jänicke, M. and Jörgens, H. (eds.) (2000): *Umweltplanung im internationalen Vergleich. Strategien der Nachhaltigkeit.* Berlin/Heidelberg/New York: Springer.
- Jänicke, M. and Volkery, A. (2002): Agenda 2002ff. Perspektiven und Zielvorgaben nachhaltiger Entwicklung für die nächste Legislaturperiode. Kurzgutachten für die Friedrich-Ebert-Stiftung & Heinrich-Böll-Stiftung. Bonn: FES & HBS.
- Jänicke, M. and Weidner, H. (eds.) (1997): *National Environmental Policies. A Comparative Study of Capacity-Building.* Berlin/Heidelberg/New York: Springer.
- Jänicke, M., Reiche, D. and Volkery, A. (2002): 'Rückkehr zur Vorreiterrolle?—Umweltpolitik unter Rot-Grün.' In: *Vorgänge* 1, pp. 50-61.
- Johnson, A. K. (1998): 'The Influence of Institutional Culture on the Formation of Pre-Regime Climate Change Policies in Sweden, Japan and the Unites States.' In: *Environmental Values*, 7 (2), pp. 223-44.
- Jonas, H. (1984): *Das Prinzip Verantwortung. Versuch einer Ethik für die technische Zivilisation.* Frankfurt am Main: Insel.

- Kasemir, B. et al. (2000): 'Citizens' perspectives on climate change and energy use.' In: *Global Environmental Change* 10, pp. 169-184.
- Kaul, I., Conceição, P., Le Goulven, K., and Mendoza, R. U : (eds.) (2003): *Providing Global Public Goods. Managing Globalization*. New York, Oxford: Oxford University Press.
- Kersting, W. (2000): *Theorien der sozialen Gerechtigkeit*. Stuttgart: Metzler.
- Kielmansegg, P. Graf (1996): 'Integration und Demokratie.' In: M. Jachtenfuchs and B. Kohler-Koch (eds.): *Europäische Integration*. Opladen: Leske + Budrich, pp. 47-71.
- Klima-Bündnis and Alianza del Clima (2000): *Municipal Climate Protection Profiles. Status Report 2000 of the Climate Alliance of European Cities*. Frankfurt am Main: Klima-Bündnis.
- Klima-Bündnis and Alianza del Clima (2003): *Klima-Bündnis. Jahresbericht 2002/2003*. Frankfurt am Main: Klima-Bündnis.
- Kluger, J. and Lemonick, M. D. (2001): 'A Climate of Despair. Special Report "Global Warming."' In: *Time Magazine*, April 23, 2001, pp. 50-59.
- Knaus, A. and Renn, O. (1998): *Den Gipfel vor Augen. Unterwegs in eine nachhaltige Zukunft*. Marburg: Metropolis.
- Knoepfel, P. (1986): 'Discussion: Distributional Issues in Regulatory Policy Implementation—the Case of Air Quality Control Policies.' In: A. Schnaiberg, N. Watts and K. Zimmermann (eds.), *Distributional Conflicts in Environmental-Resource Policy*. Aldershot: Gower, pp. 363-79.
- Kopatz, M. (ed.) (2003): *Referenzziel Nachhaltigkeit. Kommunen als Mitgestalter einer Nachhaltigen Entwicklung*. Berlin: edition sigma.
- Kraft, M. E. (2002): 'Environmental Policy and Politics in the United States: Toward Environmental Sustainability?' In: U. Desai (ed.), *Environmental Politics and Policy in Industrialized Countries*. Cambridge, MA and London: MIT Press, pp. 29-69.
- Kremser, W. (1977): 'Die Idee der nachhaltigen Nutzung als Grundlage ökologischen Denkens in der Forstwirtschaft.' In: *Der Forst- und Holzwirt* 32, pp. 117-21.
- Lafferty, W. and Eckerberg, K. (1998): *From the Earth Summit to Local Agenda 21: Working Towards Sustainable Development*. London: Earthscan.
- Lafferty, W. M. and Meadowcroft, J. (eds.) (2000): *Implementing Sustainable Development. Strategies and Initiatives in High Consumption Societies*. Oxford: Oxford University Press.
- Langhelle, O. (2000): 'Why Ecological Modernisation and Sustainable Development should not be Conflated.' In: *Journal of Environmental Policy & Planning* 2 (4), pp. 303-322.
- Langhelle, O. (1999): 'Sustainable Development: Exploring the Ethics of Our Common Future.' In: *International Political Science Review*, 20 (2), pp. 129-149.
- Liebig, S. and Wegener, B. (1995): 'Primäre und sekundäre Ideologien. Ein Vergleich von Gerechtigkeitsvorstellungen in Deutschland und den USA.' In: H.-P. Müller and B. Wegener (eds.): *Soziale Ungleichheit und Soziale Gerechtigkeit*, Opladen: Leske + Budrich, pp. 265-293.
- Linos, K. and West, M. (2003): 'Self-interest, Social Beliefs, and Attitudes to Redistribution. Re-addressing the Issue of Cross-national Variation.' In: *European Social Review* 19 (4), pp. 393-409.
- Lipset, M. (1981): *Political Man. The Social Bases of Politics*. 3rd edition. Baltimore: Johns Hopkins University Press.
- Loske, R. (1997): 'Nachhaltigkeit als Modernisierungsstrategie. Das Beispiel Klimaschutz.' In: L. Mez and H. Weidner (eds.), *Umweltpolitik und Staatsversagen*. Berlin: edition sigma, pp. 101-107.

- Lowi, T. (1972): 'Four Systems of Policy, Politics and Choice.' In: *Public Administration Review* 32 (4), pp. 298-310.
- Lundqvist, L. J. (2000): The Informational Spread of Ecological Modernisation Ideas. Paper prepared for the International Workshop on Diffusion of Environmental Policy Innovations, Berlin, 8-9 December 2000.
- Lundqvist, L. (2004): *Sweden and Ecological Governance. Straddling the Fence*. Manchester and New York: Manchester University Press.
- Maschewsky, W. (2001): *Umweltgerechtigkeit, Public Health und soziale Stadt*. Frankfurt am Main: VAS.
- Meadowcroft, J. (2002): The Next Steps: A Climate Change Briefing for European Decision-Makers. European University Institute/Robert Schuman Centre for Advanced Studies, Policy Paper RSC 02/13. Fiesole, Italy.
- Meyers Kleines Lexikon* (1987): Stichwort 'Philosophie.' Published by Redaktion für Philosophie des Bibliographischen Instituts. Mannheim/Vienna/Zurich: Bibliographisches Institut.
- Mez, L. (1995): 'Reduction of exhaust gases at large combustion plants in the Federal Republic of Germany.' In: M. Jänicke and H. Weidner (eds.), *Successful Environmental Policy: A Critical Evaluation of 24 Cases*. Berlin: edition sigma, pp. 173-186.
- Mez, L. (2003): 'Ökologische Modernisierung und Vorreiterrolle in der Energie- und Umweltpolitik? Eine vorläufige Bilanz.' In: C. Egle, T. Ostheim and R. Zohlhöfer (eds.), *Das rot-grüne Projekt. Eine Bilanz der Regierung Schröder 1998-2002*. Wiesbaden: Westdeutscher Verlag, pp. 329-350.
- Mez, L. (2004): Energy and Climate Change Policy in Germany—Perspectives on Equity. Paper presented at the Tamaki Foundation Project Meeting 'Environmental Equity in Law and Policy in Japan, Germany, and the US', Salzburg, September 26-30, mimeo.
- Mez, L. and Weidner, H. (eds.) (1997): *Umweltpolitik und Staatsversagen—Perspektiven und Grenzen der Umweltpolitikanalyse*. Festschrift für Martin Jänicke zum 60. Geburtstag. Berlin: edition sigma.
- Miller, C. A. and Edwards, P. N. (eds.) (2001): *Changing the Atmosphere: Expert Knowledge and Environmental Governance*. Cambridge, MA: MIT Press.
- Miller, D. and Walzer, M. (eds.) (1995): *Pluralism, Justice and Equality*. Oxford: Oxford University Press.
- Minsch, J. (1994): 'Nachhaltige Entwicklung—Zur Karriere eines Begriffs.' In: M. Flury (ed.): *Bevölkerungsentwicklung, Lebensstil und Umweltverantwortung*. Bern: Interfakultäre Koordinationsstelle für Allgemeine Ökologie, pp. 127-147.
- Mol, A. P. J. and Sonnenfeld, D. A. (eds.) (2000): *Ecological Modernisation Around the World. Perspectives and Critical Debates*. London and Portland: Frank Cass.
- Montada, L. (1997): 'Psychologische Grenzziehungen als Begrenzung der subjektiven und sozialen Geltung von Moral und Gerechtigkeit.' In: W. Lütterfelds and T. Mohrs (eds.): *Eine Welt—Eine Moral? Eine kontroverse Debatte*. Darmstadt: Wissenschaftliche Buchgesellschaft, pp. 36-59.
- Münkler, H. and Fischer, K. (Hg.) (2002): *Gemeinwohl und Gemeinsinn. Rhetoriken und Perspektiven sozialmoralischer Orientierung*. Berlin: Akademischer Verlag.
- Neidhardt, F. (2000): 'Formen und Funktionen gesellschaftlichen Grundkonsenses.' In: G. F. Schuppert and C. Bumke (eds.), *Bundesverfassungsgericht und gesellschaftlicher Grundkonsens*. Baden-Baden: Nomos, pp. 15-30.
- Neidhardt, F. (2002): 'Öffentlichkeit und Gemeinwohl. Gemeinwohrrhetorik in Pressekomentaren.' In: H. Münkler and K. Fischer (eds.): *Gemeinwohl und Gemeinsinn. Rhetoriken und Perspektiven sozial-moralischer Orientierung*. Berlin: Akademischer Verlag, pp. 157-175.

- Neumayer, E. (1999): *Weak versus Strong Sustainability*. Cheltenham: Edward Elgar.
- Noël, A. and Thérien, J.-P. (1995): 'From domestic to international justice: the welfare state and foreign aid.' In: *International Organization* 49, 3, pp. 523-553.
- Oberthür, S. and Ott, H. (1999): *The Kyoto Protocol. International Climate Policy for the 21st Century*. Berlin etc.: Springer.
- OECD (Organization for Economic Co-operation and Development) (1993): Paris: OECD.
- OECD (Organization for Economic Co-operation and Development) (2001): *Environmental Outlook*. Paris: OECD.
- OECD (Organization for Economic Co-operation and Development) (2002): *Governance for Sustainable Development. Five OECD Case Studies*. Paris: OECD.
- Olson, M. (1965): *The Logic of Collective Action. Public Goods and the Theory of Groups*. Boston: Harvard University Press.
- O'Riordan, T. and Jäger, J. (eds.) (1996): *Politics of Climate Change: A European Perspective*. London etc.: Routledge.
- Ossenbühl, F. (1994): 'Gemeinwohl.' In: O. Kimminich, H. Freiherr von Lersner and P.-C. Storm (eds.): *Handwörterbuch des Umweltrechts*, Vol. I. Berlin: Erich Schmidt, pp. 857-860.
- Ott, H. E., and Sachs, W. (2000): Ethical Aspects of Emissions Tradings. Wuppertal papers No. 110. Wuppertal: Wuppertal Institut.
- Ottaway, M. (2001): 'Corporatism Goes Global: International Organizations, Nongovernmental Organization Networks, and Transnational Business.' In: *Global Governance* 7 (3), pp. 265-292.
- Paterson, M. (2001): 'International Justice and Global Warming.' In: B. Holden (ed.), *The Ethical Dimensions of Global Change*. New York: St. Martin's Press, pp. 181-201.
- Pearce, D. and Barbier, E. B. (2000): *Blueprint for a Sustainable Economy*. London: Earthscan.
- Pfaffenberger, W., Nguyen, K. and Gabriel, J. (2003): Ermittlung der Arbeitsplätze und Beschäftigungswirkungen im Bereich Erneuerbarer Energien. Bericht für die Hans-Böckler-Stiftung. Bremen: Bremer Energie Institut.
- Rasinski, K. A., Smith, T. W. and Zuckerbraun, S. (1994): 'Fairness Motivations and Tradeoffs Underlying Public Support for Government Environmental Spending in Nine Nations.' In: *Journal of Social Issues* 50 (3), pp. 179-197.
- Rawls, J. (1971): *A Theory of Justice*. Cambridge, Mass.: Harvard University Press.
- Rayner, S. (1991): 'A Cultural Perspective on the Structure and Implementation of Global Environmental Agreements.' In: *Evaluation Review* 15 (1), pp. 75-102.
- Rehbinder, E. (2004): Environmental Justice in Germany: Geographical Distribution of Environmental Quality, Fairness of Regulatory Burdens, and Responsibility for Future Generations. Paper presented at the Tamaki Foundation Project Meeting 'Environmental Equity in Law and Policy in Japan, Germany, and the US', Salzburg, September 26-30, mimeo.
- Renn, O. (2001): 'Ethische Anforderungen an eine Nachhaltige Entwicklung: Zwischen globalen Zwängen und individuellen Handlungsspielräumen.' In: G. Altner and G. Michelsen (eds.): *Ethik und Nachhaltigkeit*. Frankfurt am Main: VAS, pp. 64-99.
- Reuke, L., Schäfer, C. and Albers, S. (2003): *Zur Entwicklungszusammenarbeit der Bundesländer: Erklärungen und Leistungen*. Bonn: Germanwatch e. V. (see also www.germanwatch/ch.org/ez/bulae03.htm).
- Ringius, L., Torvanger, A. and Underdal, A. (2002): 'Burden Sharing and Fairness Principles in International Climate Policy.' In: *International Environmental Agreements: Policies, Law and Economy* 2, pp. 1-22.

- RNE (Rat für Nachhaltige Entwicklung (2003): *The Perspectives for Coal in a Sustainable Energy Industry*. Texte No. 4, October. Berlin: RNE.
- Roemer, J. (1996): *Theories of Distributive Justice*. Cambridge, MA: Harvard University Press.
- Rösler, C. and Trapp, J. H. (2000): 'Die Berücksichtigung sozialer Aspekte im Rahmen der Lokalen Agenda 21.' In: *Informationen zur Raumentwicklung* 1, pp. 1-8.
- Rose, A. and Stevens, B. (1998): 'A Dynamic Analysis of Fairness in Global Warming Policies: Kyoto, Buenos Aires, and Beyond.' In: *Journal of Applied Economics* 1 (2), pp. 329-362.
- Rose, A., Stevens, B., Edmonds, J. and Wise, M. (1998): 'International Equity and Differentiation in Global Warming Policy.' In: *Environmental and Resource Economics* 12, pp. 25-51
- Rothstein, B. (1998): 'Political Institutions: An Overview.' In: R. E. Goodin and H.-D. Klingemann (eds.), *A New Handbook of Political Science*. Oxford: Oxford University Press, pp. 133-166.
- Runciman, W. G. (1966): *Relative Deprivation and Social Justice*. London etc.: Routledge.
- Sachs, W. (2002): Von Rio nach Johannesburg—mit einem Umweg über New York, 11. September 2001. Wuppertal papers No. 119. Wuppertal: Wuppertal-Institut für Klima, Umwelt, Energie.
- Sachs, W., Loske, R. and Linz, M. (1998): *Greening the North. A Post-Industrial Blueprint for Ecology and Equity*. London: zed Books.
- Scharpf, F. W. (1999): *Regieren in Europa. Effektiv und demokratisch?* Frankfurt am Main and New York: Campus.
- Schmidt, M. G. (1990): 'Die Politik des mittleren Weges. Besonderheiten der Staatstätigkeit in der Bundesrepublik Deutschland.' In: *Aus Politik und Zeitgeschichte B* 9-10, pp. 23-31.
- Schnaiberg, A., Watts, N. and Zimmermann, K. (eds.) (1986): *Distributional Conflicts in Environmental-Resource Policy*. Aldershot: Gower.
- Schreurs, M. (2002): *Environmental Politics in Japan, Germany and the United States*. Cambridge, MA: Cambridge University Press.
- Schuppert, G. F. (2002): 'Gemeinwohl, das Oder: Über die Schwierigkeiten, dem Gemeinwohlbegriff Konturen zu verleihen.' In: G. F. Schuppert and F. Neidhardt (eds.) *Gemeinwohl—Auf der Suche nach Substanz*. Berlin: edition sigma, pp. 19-64.
- Schuppert, G. F. and Neidhardt, F. (eds.) (2002): *Gemeinwohl—Auf der Suche nach Substanz*. Berlin: edition sigma.
- Servicestelle Kommunen in der Einen Welt (ed.) (2002): *Give me hope, Jo'hanna?!* Bonn: Servicestelle.
- Servicestelle Kommunen in der Einen Welt and Inwent (eds.) (2003): *Globales Handeln lokal verankern. Befragung 2002 der Kommunen und Nichtregierungsorganisationen zum Stand der lokalen Agenda 21 und der Eine-Welt-Arbeit in Deutschland*. Bonn: Servicestelle (download: www.service-eine-welt.de).
- Shue, H. (1993): 'Subsistence Emissions and Luxury Emissions.' In: *Law and Policy* 15, pp. 39-59.
- Shue, H. (1999): 'Global Environment and International Inequality.' In: *International Affairs* 75, 3, pp. 531-545.
- Simonis, U. E. (1996): *Weltumweltpolitik. Grundriß und Bausteine eines neuen Politikfeldes*. Berlin: edition sigma.
- Sommer, G. and Westphalen, R. Graf von (eds.) (1999): *Staatsbürgerlexikon*. Munich and Vienna: Oldenbourg.

- Sprenger, R.-U. (2004): Coping with actual and potential losers of environmental policy reforms in the business sector: Germany, Japan, and the US compared. Paper presented at the Tamaki Foundation Project Meeting 'Environmental Equity in Law and Policy in Japan, Germany, and the US', Salzburg, September 26-30, mimeo.
- SRU (Rat von Sachverständigen für Umweltfragen) (1994): *Umweltgutachten 1994. Für eine dauerhaft-umweltgerechte Entwicklung*. Stuttgart: Metzler-Poeschel.
- SRU (Rat von Sachverständigen für Umweltfragen) (1996): *Umweltgutachten 1996. Zur Umsetzung einer dauerhaft-umweltgerechten Entwicklung*. Stuttgart: Metzler—Poeschel.
- SRU (Rat von Sachverständigen für Umweltfragen) (1998): *Umweltgutachten 1998. Umweltschutz. Erreichtes sichern—neue Wege gehen*. Stuttgart: Metzler-Poeschel.
- SRU (Rat von Sachverständigen für Umweltfragen) (2000): *Umweltgutachten 2000. Schritte ins nächste Jahrtausend*. Stuttgart: Metzler-Poeschel.
- SRU (Rat von Sachverständigen für Umweltfragen) (2002): *Umweltgutachten 2002. Für eine neue Vorreiterrolle*. Stuttgart: Metzler-Poeschel.
- SRU (Rat von Sachverständigen für Umweltfragen) (2004): *Umweltgutachten 2004. Umweltpolitische Handlungsfähigkeit sichern*. Baden-Baden: Nomos.
- Statistisches Bundesamt (ed.) (2002): *Datenreport 9. Zahlen und Fakten über die Bundesrepublik Deutschland*. Munich: Statistisches Bundesamt.
- Stolleis, M. (1975): 'Gemeinwohl.' In: H. Kunst, R. Herzog and W. Schneemelcher (eds.), *Evangelisches Staatslexikon*, 2nd edition. Stuttgart/Berlin: Kreuz Verlag, pp. 802-804.
- Streeck, W. (2001): 'Wohlfahrtsstaat und Markt als moralische Einrichtungen: Ein Kommentar.' In: K.-U. Mayer (ed.), *Die beste aller Welten? Marktliberalismus versus Wohlfahrtsstaat. Eine Kontroverse*. Frankfurt am Main and New York: Campus, pp. 135-167.
- Tóth, F. L. (1999): 'Fairness Concerns in Climate Change.' In: F. L. Tóth (ed.), *Fair Weather? Equity Concerns in Climate Change*. London: Earthscan, pp. 1-10.
- Tremmel, J. (2003): *Nachhaltigkeit als politische und analytische Kategorie. Der deutsche Diskurs um nachhaltige Entwicklung im Spiegel der Interessen der Akteure*. Munich: Ökom.
- Turner, R. K. (ed.) (1993): *Sustainable Environmental Economics and Management. Principles and Practice*. London and New York: Belhaven Press.
- UBA (Umweltbundesamt) (1993): *Umweltschutz—ein Wirtschaftsfaktor*. Berlin: Umweltbundesamt.
- UBA (Umweltbundesamt) (ed.) (1995): *Das Leitbild der nachhaltigen Entwicklung in der wissenschaftlichen und politischen Diskussion*. UBA-Texte 43/95. Berlin: Umweltbundesamt.
- UBA (Umweltbundesamt) (1997): *Nachhaltiges Deutschland: Wege zu einer dauerhaft umweltgerechten Entwicklung*. Berlin: Erich Schmidt (2nd edition 1998).
- UBA (Umweltbundesamt) (ed.) (2002a): *Erfolgreich durch Umweltschutz. Mit Nachhaltigkeit den Wirtschaftsstandort stärken*. Berlin: Umweltbundesamt.
- UBA (Umweltbundesamt) (ed.) (2002b): *Lokale Agenda 21 im Kontext der kommunalen Steuerungsinstrumente auf kommunaler Ebene*. UBA-Texte 34/02. Berlin: Umweltbundesamt.
- UBA (Umweltbundesamt) (ed.) (2002c): *Langfristszenarien für eine nachhaltige Energienutzung in Deutschland. Zusammenfassung. Forschungsbericht 200 97 104/UBA-FB 000314/Kurz*. Berlin: Umweltbundesamt.
- UBA (Umweltbundesamt) (2003): *UBA Jahresbericht 2003*. Berlin: Umweltbundesamt.

- Walzer, M. (1983): *Spheres of Justice: A Defence of Pluralism and Equality*. Oxford: Basil Blackwell.
- Walzer, M. (1994): *Thick and Thin. Moral Argument at Home and Abroad*. Notre Dame: University of Notre Dame Press.
- WBGU (Wissenschaftlicher Beirat Globale Umweltveränderungen) (2001): *Welt im Wandel—Neue Strukturen globaler Umweltpolitik. Jahresgutachten 2000*. Berlin/Heidelberg/New York: Springer.
- WBGU (Wissenschaftlicher Beirat Globale Umweltveränderungen) (2002): Entgelte für die Nutzung globaler Gemeinschaftsgüter. Berlin: WBGU.
- WBGU (Wissenschaftlicher Beirat Globale Umweltveränderungen) (2003): Über Kioto hinaus denken—Klimaschutzstrategien für das 21. Jahrhundert. Sondergutachten 2003. Berlin: WBGU.
- WBGU (Wissenschaftlicher Beirat Globale Umweltveränderungen) (2004a): Erneuerbare Energien für eine nachhaltige Entwicklung: Impulse für die *renewables 2004*. Berlin: WBGU.
- WBGU (Wissenschaftlicher Beirat Globale Umweltveränderungen) (2004b): Welt im Wandel. Armutsbekämpfung durch Umweltpolitik. Zusammenfassung für Entscheidungsträger. Berlin: WBGU.
- WCED (World Commission on Environment and Development) (1987): *Our Common Future*. Oxford and New York: Oxford University Press.
- Weale, A. (1992): *The New Politics of Pollution*. Manchester: Manchester University Press.
- Weidner, H. (1995): Twenty-five Years of Modern Environmental Policy in Germany. WZB discussion paper FS II 95-301, Berlin: Wissenschaftszentrum Berlin für Sozialforschung.
- Weidner, H. (1997): Performance and characteristics of German environmental policy: Overview and expert commentaries from 14 countries. WZB discussion paper FS II 97-301. Berlin: Wissenschaftszentrum Berlin für Sozialforschung.
- Weidner, H. (1999): 'Umweltpolitik: Entwicklungslinien, Kapazitäten und Effekte.' In: M. Kaase and G. Schmid (eds.): *Eine lernende Demokratie—50 Jahre Bundesrepublik Deutschland*. WZB-Jahrbuch 1999. Berlin: edition sigma, pp. 425-460.
- Weidner, H. (2002a): Gemeinwohl und Nachhaltigkeit—ein prekäres Verhältnis. WZB discussion paper FS II 02-303, Berlin: Wissenschaftszentrum Berlin für Sozialforschung.
- Weidner, H. (2002b): 'Wie nachhaltig ist das Gemeinwohl?' In: G. F. Schuppert and F. Neidhardt (eds.), *Gemeinwohl—Auf der Suche nach Substanz*. Berlin: edition sigma, pp. 127-55.
- Weidner, H. (2002c): 'Environmental Policy and Politics in Germany.' In: U. Desai (ed.), *Environmental Politics and Policy in Industrialized Countries*. Cambridge, MA: MIT Press, pp. 149-201.
- Weidner, H. and Brandl, S. (2001): Synopse zu Arbeit und Nachhaltigkeit in Zukunftsstudien. WZB discussion paper P 01-511. Berlin: Wissenschaftszentrum Berlin für Sozialforschung.
- Weidner, H. and Jänicke, M. (2002): *Capacity Building in National Environmental Policy. A Comparative Study of 17 Countries*. Berlin/Heidelberg/New York: Springer.
- Weingart, P., Engels, A., Pansegrau, P. (2002): *Von der Hypothese zur Katastrophe. Der anthropogene Klimawandel im Diskurs zwischen Wissenschaft, Politik und Massenmedien*. Opladen: Leske + Budrich.
- Weizsäcker, C. C. von (2001): 'Der kapitalistische Wachstumsprozeß der Weltwirtschaft.' In: C. Leggewie and R. Münch (eds.): *Politik im 21. Jahrhundert*. Frankfurt am Main: Suhrkamp, pp. 15-26.

- Wiegand, E. (2001): 'Climate Change, Equity, and International Negotiations.' In: U. Luterbacher and D. F. Sprinz (eds.), *International Relations and Global Climate Change*. Cambridge, MA: MIT Press.
- Wolf, R. (1991): 'Im Fiaker der Moderne. Von den Schwierigkeiten ökologischer Gerechtigkeit.' In: *Kritische Justiz* 3, pp. 351-62.
- Yearley, S. (1996): *Sociology, Environmentalism, Globalization: Reinventing the Globe*. London etc.: Sage.
- Young, I. M. (1990): *Justice and the Politics of Difference*. Princeton: Princeton University Press.
- Zimmermann, K. (1985): *Umweltpolitik und Verteilung. Eine Analyse der Verteilungswirkungen des öffentlichen Gutes Umwelt*. Berlin: Erich Schmidt.