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## AN OVERVIEW ON ENVIRONMENTAL POLICY IN THE FEDERAL REPUBLIC OF GERMANY

This paper presents an overview of the environmental policy development in the Federal Republic of Germany. It gives a general assessment of advantages and disadvantages of this plan, a description of the decision-making process, and a definition of optimal policy.

#### 1. Defining Environmental Policy

"Environmental policy can be defined as the sum of objectives and measures designed to regulate society's interaction with the natural environment. It comprises aspects of environmental conservation, restoration, and management."

Practice, however, does not conform to such a broad definition. Generally, only selected parts of the set of relations between society and the natural environment become the subject of environmental policy. So far, environmental policy has mostly been understood as a set of policies concerning the control of the environmental media, i.e., air, water, and soil. This conventional type of environmental policy was based on the recognition that a number of waste products resulting from production and consumption processes are detrimental to human health. But until relatively recently, it has been less apparent that the overall

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efficiency of natural and economic systems and, ultimately, the sustainability and the acceptability of the whole social system are endangered.

Political response to this realization brought about changes during the late 1960s and the 1970s to reduce the amount, kind, and degree of harmfulness of various waste products. Contrary to early assumptions, however, other discrete policy areas that control the use of resources and the corresponding technical systems--especially the policies governing industry, infrastructure, technology, energy, and agriculture--proved to be vital factors in the relationship between society and environment. Of course, conventional media-specific environmental regulation is useful and still necessary. However, it carries the risk that the measures used are not coordinated, that problems may be spatially shifted and/or displaced from one environmental medium to another.

The discussion on the relationship between society and environment should thus not solely be confined to the questions described above. A more comprehensive, holistic perspective on environmental problems might be needed in which the political response of the various actors, such as government, industry, environmentalists, and of society as a whole to the environmental issue, i.e., to depletion and pollution, should become the focus of discussion.

After a decade or so of practical environmental policy, the basic lines of response to environmental problems can be pointed out. Of primary importance is the question of political response or implementation of policy, namely: how rapidly and in what way or style does such response occur and how much freedom do the various societal actors have in actively selecting existing options to deal with environmental problems?

The tendency to persist on more or less re-active stages of response has been viewed by many critics of environmental policy as a systematic defect of industrial society. Whether, and to what extent processes of ecological re-orientation and structural change take place depends strongly on the knowledge acquired about environmental damage itself, on the availability of low emission technologies and on the relative strength of economic and political interest groups when envi-

ronmental damages are assessed and their costs distributed. Successful environmental policy, then, results in part from improved information; it is, furthermore, determined by structural, economic and social change.

It may be assumed that as knowledge about the state of the environment, its trends and determinants increases, responses that go beyond mere reaction can be expected. Environmental policy would then progress from a react-and-cure strategy to an anticipate-and-prevent strategy. It would evolve from a policy of <u>ex post</u> environmental protection into an integrated <u>ex ante</u> environmental policy devoted to an ecologically sound development of the economic and technological systems. This concept of anticipating or preventive environmental policy could, in short, be described by several basic patterns of objections and instruments:

- Prevention of the spread of all harmful emissions that exceed the assimilative capacities of ecosystems through more and better recycling, introduction of low emission technologies, and preemptive substitution of environmentally harmful products and production processes.
- Conservation of non-renewable resources, encouragement of the use of highly efficient renewable resources, and reduction of harmful combustion processes of all kinds.
- Active management of the natural environment allowing for greater participation of hitherto underrepresented public groups in the relevant planning procedures, and through a broad institutionalization of the prevention principle throughout society.

By consequence, the successful application of preventive environmental policy would require structural changes in the existing political and administrative system because it must cover a scope broader than that of conventional, media-specific environmental policy.

## 2. <u>General Assessment of Environmental Policy in the Federal Re-</u> public of Germany

In the mid 1980s the environmental issue has a strong basis in West German society. By the end of 1982, the Green party was represented in six regional parliaments, the general election of March 1983 brought them into the national parliament. Some 1,500 environmental initiatives and associations were counted, with more than 5 million

members. The press activities on environmental questions have increased tremendously, reaching far beyond specialists and making the "environment" a concept known throughout the country and an issue of day-to-day political debate.

The level of environmental awareness of the population has reached a new high. According to a recent representative survey some 80% of the general public, 80% of the industrial managers, 93% of the politicians and some 99% of the environmentalists declared the situation of the natural environment to be a "serious problem".

These and other indications show that, within a decade or so, the environmental issue in the FRG has become a major political theme. In the first government environmental programme proclaimed in 1971, the promotion of environmental awareness had been declared a goal of environmental policy. One may say that this goal has been reached, though not only because of environmental policy, but also despite environmental policy. With regard to other goals, however, especially those for some of the environmental media an assessment does not produce such good results. Four media related environmental sectors shall be assessed below.

Successes and failures of environmental policy, of course, are not that easy to assess. This is especially true for the FRG, where there is a specific division of labour between the national and the regional level when comparing goal setting and use of instruments. Fairly early in the period of official environmental policy, which started in 1971, the thesis of "implementation shortfalls" was put forward. That means, a discrepancy was discovered between the pretentious legal regulations and goals of national environmental policy and its practical application at the regional and local level.

A comprehensive assessment of environmental policy in the FRG, therefore, would have to look not only for the specific weaknesses originating from the institutional relationships in a federal political system (division of labour between the various governmental levels), but also for the structural factors conditioning goal setting, legal provisions, and use of instruments - among them the role of the various sectoral interests, especially those of industry and environmentalists, the role of the press, of jurisdiction, of international and supra-national relationships, etc. Such a comprehensive assessment cannot be given here. However, a short overview can be presented on the successes and failures of environmental policy with regard to certain environmental sectors, and also with regard to the West German policy style developed on the environmental issue.

Since the early 1970s, environmental policy has helped to reduce problems in some sectors, while in other sectors, the problems have aggravated. The improvements in environmental research, especially in monitoring techniques, disclosed so far unknown problems and cause-effectchains (dioxin being a spectacular example). In the following, an overview is presented on four sectors of environmental policy.

## 2.1. Air Pollution

Since the early 1970s air pollution in the FRG decreased with regard to certain pollutants, while with respect to others, the growth rate remained stable; in the early 1980s, however, some new problems appeared in full force. A decrease in air pollution was reached with regard to:

- dust emissions, which decreased from 1.8 million tons in 1966 to 0.7 million tons in 1982; dust emissions from coal energy plants were reduced to one-third in the same period;
- carbon monoxide emissions were lowered by about one-third;
- due to the law on lead in gasoline (1971) the lead content in the air in urban areas was reduced by some 65%;
- a slight decrease was recorded with regard to  $SO_2$  emissions (from 3.2 to 3.0 million tons per year).

In contrast, the development in other areas was rather dissatisfactory. Locally immissions of heavy metals in several cases exceeded the safety limits. A further increase in the  $NO_X$  emissions was registered from 2 million tons (1966) to more than 3 million (in 1982). In the early 1980s, a drastic aggravation of the problem of acid rain occured. Damage from acid rain was registered not only for buildings, monuments, lakes and soil, but especially for the forests. An unprecedented increase of forest damage (or the dying of forests, <u>Waldsterben</u>, as it is called in German) took place, affecting in some regions

more than 70% of the forest stock. Of course, a heavy debate started on the cause-effect-chains ( $\underline{NO}_X$  or  $\underline{SO}_2$ , or  $\underline{Ozon}$ , etc.) leading to a large number of different theories. This debate by the scientists diverted, in some sense, from implementing measures to reduce air pollutants at once. Forest damage has now become a <u>burning issue</u>, not only in Germany, but also in some neighbouring countries.

One main reason for the increase of  $NO_X$  emissions since the 1970s has been the still growing number of automobiles. Because of the chosen type of optimising the car's engine efficiency, and because of higher combustion temperatures, more  $NO_X$  emissions have resulted. In contrast,  $NO_X$  emissions in industrial production in general have decreased.

The main opponent to a drastic environmental policy in the air pollution sector is, of course, industry. The major early success of anti air pollution policy in the FRG was the enforcement of the law on lead in gasoline (1971) which, however, had to be enacted against strong delaying action by the respective industry. This successful strategy is to be mentioned because all other legislative steps which followed were much more a react-and-cure type of policy. The regulatory provisions of the Federal Immission Act of 1974 mainly addressed new plants only, while for existing plants the criterion of "economic feasibility" is relevant, which, in general, weakens the position of the regulatory bodies in all cases of conflict. Even the question of what a new and what an old plant is has in several cases led to serious political debate, as in the Buschhaus case.

Furthermore, this legislation is predominantly oriented towards immissions, leading to a high demand for monitoring and control systems. In this way, <u>end-of-pipe</u> technology is strongly promoted while integrated, low emission technology may not get the necessary incentives. These add-on solutions, typical for the air pollution sector, in general led to "problem shifting", i.e. cross-media or interregional secondary effects. One example for such solutions is the policy of "high smokestacks" which may reduce pollutants locally, but transfers them regionally and towards other environmental media, especially water and soil.

While the "polluter pays principle" in the air pollution sector has at best been applied to new plants (TA-Luft, technical ordinance for clean air), the "taxpayer pays principle" has not been directly applied. This means, that in contrast to other policy sectors (e.g. noise abatement) in the FRG there has been <u>no direct governmental expenditure programme</u> for anti air pollution measures in stationary sources but only indirect ones (as e.g. tax remissions, etc.). Regarding mobile sources of air pollution such as the automobile, the current government programme is also of an indirect type, i.e. using tax incentives for cars with catalytic converters or low emission engines. This programme, however, <u>has been weakened through intervention by the</u> <u>European Community</u>, because national tax incentives for low emission automobiles are interpreted as being in contradiction to the provisions of the EC treaty.

## 2.2. <u>Water</u> Pollution

In the 1970s the water laws in the FRG were reshaped and, in connection with several EC directives and international conventions, led to certain improvements of the water quality:

- in 1982, some 88% of the population was connected to waste water treatment plants; the waste water of 73% of the population was biologically treated;
- the eutrophication of water was rapidly reduced;
- in the rivers and surface water bodies a reduction in the load of heavy metals was registered.

The efforts in this sector were - quite similiar to the air sector concentrated on a few pollutants, like phospate, heavy metals, and chlorofluoromethanes. Unfortunately, however, these pollutants cannot be successfully reduced by biological purification only. They accumulate in the sewage sludge which again is difficult to handle in an economically and ecologically sound way. In this sense, water pollution is still a problem despite the large amount of public investments that have directly gone into purification plants all over the country. In addition, there has been growing evidence of the deteriorating quality of the ground water. In some regions, the ground water is heavily affected, by nitrates diffused by agricultural activities, by herbicides and pesticides, toxic heavy metals, etc. Securing good water quality has thus become more costly, and in this way creates new awareness on existing problems in the water sector.

It may be interesting to point to the policy instruments used in this sector of environmental policy. Contrary to the air sector, diversified regulatory measures and public investment activities go hand in hand with new economic incentives. The law on detergents (1975) provided for a continuous reduction in the use of phosphate, the last stage of which came into effect in 1984. Large sums of public investments were spent for sewage, drainage, and waste water purification plants, while comparatively few resources and ideas were spent for waste water recycling. Again, as in the air pollution sector, the strong emphasis on the ex-post-treating of polluted water instead of reducing the entry of pollutants into the water cycle led to "problem shifting". This cross-media effect is especially obvious as regards the use of toxicated sewage sludge as manure for agricultural land.

In 1981, an economic instrument was enacted in the water sector which attracted great public and scientific attention. The Waste Water Charges Act imposes a levy on the discharge of effluents into bodies of water. The assessment basis is the degree of pollution of the waste water which is measured in polluting units, and the rate per polluting unit is progressive. It seems, however, that the expectations connected with this instrument will not be fulfilled, particularly because in the process of enacting this law the charge itself was continuously lowered, thus decreasing the incentive to take action to reduce the amount and degree of pollution of waste water. Furthermore, so far, water saving, quite contrary to energy saving, has not as yet become a widespread social activity in the FRG.

#### 2.3. Noise Pollution

With regard to noise pollution some problems have been tackled while others are still waiting to be solved:

- Noise in industry and at the work place in many cases was drastically reduced; new plants and equipment in general produce less noise;
- particularly successful were the efforts to reduce noise from construction activities;

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- the law against aircraft noise and the respective measures taken (prohibition to fly during the night; investment in passive noise abatement measures in areas near airfields; compensation for noise pollution), action against noisy aircraft (higher landing fees), and the continuous introduction of new, less noisy aircraft produced some relief from this very special environmental problem.

Besides these and other partial improvements the overall noise pollution, however, remained fairly unchanged especially because of the still increasing noise from automobile traffic. Since 1970 the number of automobiles in the FRG has increased from 15 to 30 million, and road construction is still going on despite the fact that the road network is one of the most dense and perfect networks in Europe. Although a public debate started regarding a speed limit for cars, especially on the Autobahns ("Tempo 100"), the government was not in a position to overrule the interests of the automobile industry and most automobile clubs. Even the dramatic increase of <u>Waldsterben</u> and the pressure from the environmentalists so far have not contributed to bring the speed limit proposal beyond the feasibility stage.

However, mention must be made of several interesting developments. Many West German cities are now experimenting with a speed limit ( $\underline{\text{Tem-}}$ <u>po 30</u>) in built up and densely populated areas. On the Autobahns more and more car drivers voluntarily reduce speed, and, especially for local activities (travel between home and the work place; shopping) the bicycle has regained many of its former functions. In this respect, some parts of West Germany now very much resemble Holland, i.e., the typically Dutch bicycle scenery.

All in all, the noise problem is still one of the public evils. Every second household feels affected by noise pollution. There are estimates that some 8 million people suffer from illnesses induced by noise pollution, such as cardiac and circulatory illnesses, nervousness, insomnia. As with the other environmental sectors, anti noise policy was predominantly of the react-and-cure type described above. Autobahns and highways ware increasingly furnished with all kinds of acoustical barriers, while the actual sources of the problem (noisy engines; high speed) were not seriously handled. Again, the passive noise abatement measures proved fairly costly and not very effective. Active noise

abatement, on the other hand, did not get the necessary priority, maybe because, in order for this to be implemented, it would be absolutely necessary to integrate technical innovations (like low noise emission techniques) with social innovations (the "leisurely society"). However, urban and regional planning in the FRG nowadays is much more sensitive towards environmental questions, the "ecological restructuring of the city" has become more than just a vague idea.

## 2.4. Waste Materials

The waste management programme of 1975 has three main goals: improving waste treatment; increasing waste recycling; avoiding unnecessary waste generation. The respective achievements differ to a large extent.

Regarding waste treatment

- in 1970 there were some 50,000 so-called "wild" refuse dumps, while in the early 1980s there were only 500 "orderly" central refuse dumps left;
- for the particularly toxic wastes (so-called <u>Sonderabfall</u>) the number of special treatment plants and refuse dumps has increased from only 10 at the beginning of the 1970s to about 100 in the mid 1980s.
- in the same period the number of municipal incineration plants doubled from 24 to 48.

These developments in "orderly" waste treatment had to be implemented against strong economic interests but were facilitated via the "polluter pays principle" by collecting charges according to the amount and toxicity of the waste produced.

With regard to waste recycling some spectacular achievements were reached:

- Following some good marketing ideas of experts in the field, e.g. waste glass recycling jumped from 50,000 t in 1970 to more than 830,000 t in 1983;
- regarding tin plate from household waste the recycled material increased threefold between 1970 and 1983;

- the percentage of used oil collected and processed increased guite remarkably; the percentage of mercury batteries recycled is above half of the total production;
- recycling of plastics has increased from only 150,000 t in 1970 to about 450,000 t in 1983, etc.

These developments were, to a large extent, supported by the price increases for raw materials on the world market, and also by the increased environmental awareness of the population that was successfully transformed into positive saving action. A new industry developed for processing and recycling waste, and within existing plants recycling gained ground as an environmentally necessary and in many cases economically profitable undertaking.

The other side of the coin of technocratic solutions to environmental problems also became apparent: Processing and recycling of waste leads to an accumulation of toxic substances which in the end must be treated specifically, thus increasing cost and producing a new quality to the problem. The diffusion of dioxin from municipal incineration plants was one spectacular issue in the German debate, the drain of toxic waste water from refuse dumps another one. A regionally quite relevant issue resulted from the disposal of dredged sludge from highly polluted river and harbour sediments.

Regarding the third main goal of waste management, i.e., avoiding waste generation from the outset, no real success was achieved:

- household waste increased from 16 million tons in 1970 to more than 33 million tons in 1983;
- toxic waste (<u>Sondermüll</u>) increased from about 2 million t to 4.5 million t in the same period.

Regionally and locally this avalanche of waste has reached serious dimensions. Cities like Hamburg and Frankfurt can neither bury nor burn all the waste they produce and are heavily dependent on the neighbouring regions for that purpose. Thus a "waste tourism" was created, leading to sometimes extraordinary patterns of conflict solving. No wonder that the packaging industry meanwhile has come under strong pressure from all sides because of the simply unnecessary or

all too voluminous packages. A package tax was proposed, but has not yet been introduced. Arrangements on stabilising the use of one-way containers (glass bottles) and increasing the share of returnable containers were tested but in general are far from their full potential.

Again, the developments in waste management clearly show the limits of sectoral approaches to the pollution problem. As long as <u>ex post</u> treatment of the byproducts of the production and consumption processes dominates, and integrated low emission technologies have not yet reached full scale application, an increasing amount of waste is generated or a hazardous quality of waste is emerging. Furthermore, new cross-media problems lie ahead. For instance, it is estimated that by the early 1990s, the successful introduction of desulphurisation devices in the energy plants will lead to volumes of gypsum approximately three times the overall demand for that material in the economy.

It may be added here that desulphurisation and denitrification devices for energy plants are very space-intensive and just because of this reason cannot be applied in all the existing plants, especially not in built-up cities. Thus, new space for storing a new kind of waste will be needed, making the waste issue even more significant in the future for such s small and densely populated country as the FRG.

Finally, waste problems may not end when refuse dumps are closed down. Out of the registered 30,000 old refuse dumps the government classifies some 1,000 to 2,000 as "being problematic" in the broad sense of the word. In everyday language old refuse dumps therefore are often called "old burden" (<u>Altlast</u>), a synonym for possible inter-generational conflict. A recent estimation shows that at least 17 billion Deutschmark will be needed for technically treating such Altlasten.

# 3. <u>The Decision-Making Process in Environmental Policy in the Fe</u><u>deral Republic of Germany</u>

3.1. Short History of Environmental Policy

In the Federal Republic of Germany - as elsewhere - the new wave of environmental policy started around 1970, with the preparations for the UN Conference on the Environment in Stockholm. The SPD/FDP coalition had come to power in 1969 and quickly adopted the environmental issue as part of its reformist policy package. The preferred policy approach at that time was that of a "grand coalition", a seeming consensus of interests.

The government swung forcefully into action, generating progressive legislation and setting up expert committees to support the policy effort. The first national environment programme of 1971 was strongly based on the "polluter pays principle", modified however from the start by the criterion of "economic feasibility". The programme had two parts, one on guidelines and measures for policy advice, research and promotion of environmental awareness of the general public, and the actual action programme of technical environmental protection measures.

In the period to 1974 laws were passed on lead in gasoline, aircraft noise, DDT, and the Federal Immission Act came into effect. Organisational changes to integrate environmental interests into policy discussion also started in the early 1970s. In 1973, the first forum of the Group on Environmental Questions (AGU) was held, the Council of Advisors on the Environment (<u>Sachverständigenrat für Umweltfragen</u>) presented its first special report ("The Automobile and the Environment"), followed in 1974 by the first general "Report on the State of the Environment". In 1974 the Federal Environmental Agency (<u>Umweltbun-</u> desamt) was established.

The following year, 1975, has been identified as the first shock to the new policy. Economic interests regained priority over environmental protection, because a combined effort to save energy (oil price increase) and to protect the environment was not yet seen as mutually reinforcing.

Thus until around 1975, environmental policy in the FRG proceeded in the "concertation" style of reformpolitik. The intention on the part of the government to give participatory status to environmentalists was still manifest in day-to-day politics and in the review procedures of draft legislation. In the mid 1970s, however, the mood changed in the wake of the oil price hike, and when the chancellorship changed

hands from Willy Brandt, the reformist, to Helmut Schmidt, the pragmatist. Also the "limits to growth" debate scared industry away from concerted action (<u>konzertierte Aktion</u>) in environmental policy, and the subsequent laws on nature protection and waste water charges (1976) were conceptually good but practically lacking in the necessary force; talk on the "implementation shortfall" (<u>Vollzugsdefizit</u>) began.

The progressive approach to research and information was also not followed through. Simultaneously with this abandonment of parts of environmental policy the nuclear energy programme was further expanded. This "razor's edge" of industrial development became the target of both the environmental protection groups and of the politicised "generation of 1968". And both began to identify a more or less radical potential in the ecological critique of industrial society - comparable to the socialist critique of industrial society in the last century.

The early achievements in official policy formulation had in many ways legitimized environmental concerns in the public eye. Political as well as legal successes of environmental interests encouraged environmentalists to further action. And the path taken by the government in pursuance of quantitative economic growth policy led many to leave the established governing consensus to form the Green party in 1979. This party had its main support in thousands of citizens initiatives (<u>Bürgerinitiativen</u>), which had in turn been fostered by the so-called "so-cial liberals" (especially in the SPD and FDP), as well as by academic activist groups.

One may thus interpret the extra-parliamentary politicisation of environmental policy in the FRG as the product of two main factors: First, the principles of cooperation and prevention seem to be compatible only when the political authority is really able and willing to steer them in the sense of a "regulatory" policy, i.e. the very policy style opposed by many environmentalists, especially the Greens. Fragmentation at government level and change in government policy priorities resulted in a lack of such authority after 1974. Second, environmental awareness of the general public was rapidly growing, and in this way a large part of the environmental movement found itself politically "out in the cold" again. Consequently, the lack of readily institutionalised access for pressure groups left many of the emanci-

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patory environmental interests outside the arena of government, with little or no incentive at all to cooperate. The spectacular emergence of the Greens in 1983 put the environmental issue back on the political agenda, this time at the top.

Much of what was said above implies that the management of the environmental issue in the FRG has become especially difficult. Ironically, this is so in large part because of the emergence of the Greens as a party, as the established parties in this way were not only challenged by environmental ideas and political demands but by a new competing party. It is most certainly premature to suggest that this is evidence of a major legitimatory crisis in West German politics. Indeed, one may suggest that the very emergence of an environmental party seems to be an indication that the political system is able to adapt to the needs of the population. Dissatisfaction with the existing parties and their policies has given rise to a new party to represent those interests whose voice has not been heard or was not taken seriously.

One might qualify this assessment in the sense that the environmental issue in West Germany has been a challenge to the standard policy style. Concertated action worked well during the periods of the "economic miracle" and "Reformpolitik", but confrontation and polarisation appeared when, because of environmental damages, the logic of economic growth and the associated institutional procedures were criticized. By directly challenging the policy style, the environmentalists and especially the Greens signalled that "business as usual" in policy-making is rejected. The very need for the established parties to balance their political interests against the environmental interests may have forced the environmentalists into the electoral arena. The ability and flexibility of the established parties to recognize these environmental interests will decide on how long environmentalism is going to remain as a political party, or will retreat to the position of a general fundamental movement (or undercurrent) beyond and across traditional party lines. As the trade unions are still very much growth and industry oriented, and fairly powerful within the Social Democratic Party (SPD), and business interests within the conservative parties (CDU/CSU) and the liberal party (FDP), it is still difficult for the environmentalists to get a strong foothold in these parties. How-

ever, the electoral successes of the Greens have produced countermoves by the old established parties in order to reattract the environmentalist vote. It therefore seems as if the "greening" of the established parties has begun, and so it is an open question of how long the Greens are going to stay in the political arena.

## 3.2. <u>Overview on Institutional Organisation of Environmental</u> Policy and Integration of Environmentalists

At the national level in the Federal Republic of Germany, responsibility for the media-specific environmental policy (air and water pollution) rests with the Ministry of the Interior (BMI); there is no specific ministry of the environment. Responsibility for soil protection rests with the Ministry of Food, Agriculture and Forestry (BML). Research on environmental questions and policy draft formulation is performed by the Federal Environmental Agency (<u>Umweltbundesamt</u>), a subordinate agency of the BMI.

It is obvious that both for the BMI and the BML environmental policy goals compete with other policy goals. During the 1970s and up to the early 1980s, both ministries were headed by ministers from the liberal party (FDP), which also had charge of the Ministry of Economic Affairs (BMWi). Since the change of government after 1982, the conservative party is in charge of the BMI and the BML, while the liberal party still holds the BMWi. Thus, the inter-ministerial goal conflicts were always, although to a different degree, exacerbated by conflicts between the "environmental" and the "economics" ministries.

As far as location of substantive policy responsibility is concerned, the competence for formulating of air and water pollution policies, protection of species, waste and noise pollution lies at the national level. The <u>Länder</u> have responsibility for the implementation of the national laws. Because of this division of labour, vertical dispute may occur, especially when national opposition parties are in government at the Länder level.

The fragmentation of government responsibility for environmental policy in a federal system, of course, make corridoring difficult. This

rather complicated institutional arrangement is further complemented by the role of the courts in environmental policy.

At quite different occasions, but not always in a systematic manner, courts allowed environmental interests veto points at the level of implementation. Resort to the courts is an important aspect of the institutional set-up of environmental policy in the FRG. Where negotiation fails to secure consensus, it is likely to attempt to close down the case by seeking an authoritative legal resolution. In this way court battles sometimes substitute for political decision-making. This "policy through the courts" has been especially pronounced in the cases of energy plant siting, and also in the case of furnishing energy plants with cleaning devices, e.g., the famous Buschhaus case which was first decided politically, then was stopped by the courts, and finally was overruled by additional government ordinances.

Regarding the question of the integration of environmentalism into the political decision-making process mention must be made of at least three national organisations of environmental interests, all of which work quite differently: the Federation of Nature and Environmental Protection (BUND), the German Nature Protection Ring (DNR), and the Federation of Citizens Initiatives for the Environment (BBU). All of these are umbrella organisations, and all are of post-war origin.

The BUND was founded in 1970 and is closest to a traditional type of national environmental pressure group. It has direct, inter-organisational links with groups and members at the local level, such that its members can focus on local environmental problems but also can be expected to endorse and support negotiations of the organisation with government.

The DNR was founded as a result of a ministerial initiative in 1950. It is an organisation which encompasses both nature protection interests and the hunting, shooting and fishing associations. Its structure in a way precludes strong and unified pursuit of strict environmental policy goals. Its credentials for active environmentalists therefore are rather weak.

The BBU can closely be identified with direct action initiatives and party politics, and in this way it has been quite important in promo-

ting the environmental issue and in pushing governments to take action. It adopted new environmental questions, most noticeably nuclear power und nuclear armament, but also air pollution, and <u>Waldsterben</u>. The BBU has contact with its member associations via dissemination of information, but cannot represent their individual interests or sanction member groups who would not agree with the bargains struck with governments. Recently, there are signs that the eminently powerful position of BBU has passed its peak.

Finally, mention should be made of the Working Group on Environmental Questions (AGU) which is composed of various interests relevant to environmental policy, including government, administration, industry, the scientific community, and has close access to policy discussions at the national level.

## 4. Concluding Remarks

In drawing some conclusions from the brief review of environmental policy in the Federal Republic of Germany, the most important features of the decision-making process and the factors influencing the political management of the environmental issue shall be summarized.

The environmental issue was first introduced to the general public by governmental initiative in an activist way but at the same time in a consensus-oriented policy style. Programme formulation and growing environmental awareness sensitized the public to questions of environmental quality. Implementation of policy, however, fell increasingly short of policy targets, partly because of institutional reasons, partly because of a change of priority in policy; reformist environmental policy lost ground to pragmatic industrialism, and harmony between environmental and economic policy was no longer actively pursued. As a result, environmentalism gained ground, partly in fairly institutionalised organisations, partly as a broad social movement. Due to rather inflexible responses by the established parties, large parts of the environmental movement turned to the ballot-box and supported the Green party, an attempt to challenge dominant value positions in the parliamentary arena.

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From recent experience, however, the presumption of a legitimacy crisis surrounding the emergence of the Green party seems questionable, not only because of a certain plurality of policy styles in the FRG, but also because the traditional parties in the end jumped on the environmental bandwagon and started to integrate the environmental issue into their own policy programmes. The environmental groups and also the mass media have very much influenced what the actual issues are. This complexity of the West German policy process and the special institutional conditions under which policy develops at first produced a consensus oriented style of environmental policy, after the end of the era of rapid economic growth the approach to dealing with dissent and environmental protest was decidedly of an imposition type, which in turn served to mobilize the Greens, and only later on changed again into a more consensus oriented policy style again.

Regarding the pretentious claims for an integrative, holistic approach to environmental policy, a number of questions remain open. Programmes have always promoted the idea of anticipating and preventing environmental problems. The practice of environmental policy, however, was predominantly a re-active one. It tried to solve problems after they had occurred.

Furthermore, environmental policy was very much sectorized; not only with regard to the instruments used, but also the legal foundations of action and the government institutions were very much dominated by the sectoral approach. This all too often leads to problem-shifting, i.e. to undesirable cross-media and inter-regional effects. In this way, the problem is partly solved but appears in a different form in a different sector and at a different place in the environment.

It seems therefore that not only institutional streamlining but also new approaches to practical environmental policy are needed. Despite all necessary further discussions the direction of such policy change is clear: It should be towards a consensus seeking, participatory policy style and turn away from a react-and-cure towards an anticipateand-prevent strategy. The environmental policy style and strategy may change again and thus may better recognize the fact that polarised and sectoral approaches are costly, economically and ecologically speaking, and that holistic and integrated approaches are intellectually more demanding, but at the same time, more rewarding.

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POLITYKA REPUBLIKI FEDERALNEJ NIEMIEC W ZAKRESIE OCHRONY SRODOWISKA

Omówiono rozwój polityki RFN w zakresie ochrony środowiska. Oceniono sukcesy i niedomagania tej polityki. Opisano proces podejmowania decyzji oraz podano definicję optymalnej polityki.

> ПОЛИТИКА ОХРАНЫ СРЕДЫ, ПРОВОДИМАЯ В ФЕДЕРАТИВНОЙ РЕСПУБЛИКЕ ГЕРМАНИИ

Обсуждено развитие политики ФРГ в области охраны среды. Оценены достижения и недостатки этой политики. Описан процесс принятия решения, а также приведено определение оптимальной политики.