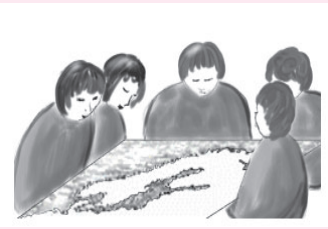
Making and implementing environmental policy

22

Politics is made in governments and in parliaments, but also in the streets. Here members of the group ”Reclaim the City” is having a so-called street party in Stockholm in 2001. The group regrets that municipal transport is being reduced and private car traffic is taking over the city. ”Reclaim the City” wants to have a city based on democracy, openness, tolerance, equity, justice and a living culture. Its methods are often illegal and confrontation with the police is common. (Photo: Katarzyna Skalska.)

"Whether we like it or not, we are now entering a century of the environment."

Ernst Ulrich von Weizäcker,
former director of the Wuppertal Institute,
now member of the German Bundestag.



After environmental issues entered the political scene in the 1960s they quickly became present in all parts of civil society. The already established national societies for nature conservation in the Nordic countries adopted an environmental agenda at an early stage. Researchers were instrumental in this process through their knowledge about the ongoing impact of industrial society on the environment. Their reports formed the basis of a new environmental policy.

In addition, citizens also influenced politics through the media and by voting. Added to the classical repertoire of political means of expression were a couple of new ones, such as green consumerism, which can be seen as voting with your wallet, and joining interest groups to exert political pressure, by lobbying.

The growing environmental movement in the the Baltic Sea region diversified into many different non-governmental organisations. NGOs influenced policy directly or indirectly, e.g. via the media, voicing their opinion on environmental issues, and getting topics on the political agenda, as was successfully done by the Ecological Club in Poland. Many NGOs co-operated on a regional basis, especially in the Coalition Clean Baltic, CCB, with a clear political impact. As well, the older World Wide Fund for Nature, WWF, also present in several of the countries, developed a strong Baltic Sea program.

Environmentalists were elected to parliaments from the 1960s on. From the 1980s, political parties with environmental protection as their main focus, the green parties, formed in all countries in the region. Parliaments are executing their power though environmental legislation, taxation of polluting activities and use of natural resources, especially energy, and of course by forming the government. In the last years of the 20th century in two countries in the region, Germany and Sweden, the Greens were part of the government or were included in coalitions with governing parties.

The state implements its policies through its institutions. The Environmental Protection Agencies, EPAs, may be the most important of them. An EPA typically is responsible for assessing the environmental situation of a country. It may do so by funding research but also through its own monitoring programmes. Governmental agencies are also responsible for issuing permits, or concessions, for activities that might be polluting. Courts of concession, water boards, etc., have this task, while state inspectorates check to see if the limits are respected.

An increasing number of decisions with consequences for environmental protection are taken by local authorities - municipalities and counties. During the 1990s, the international co-operation and support between municipalities increased very dramatically and the new activities are mainly concerned with environmental protection.

In the East, the history has been different. Environmental concerns were high on the agenda at the time of liberation. Later, they were not as visible, although political structures dealing with environmental issues have developed. An important drawback is the weak local level of government in central and eastern Europe, since this is where most environmental politics has to be carried out, and that is also where true participatory politics is being implemented.

Authors of this chapter

Magnus Andersson, main author; Jeannette Hagberg, co-author of the section on political actors, politicians, authorities, and citizen organisations; Helmut Weidner and Martin Jänicke, capacity building for environmental policy; Lars Rydén and Daiva Semeniene, co-authored on the part about environmental investments.

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The policy perspective

It all starts with a problem

The starting-point for a policy-making process is the appearance of a problem. However, as *policy problems* environmental issues such as water pollution or global climate change are not objective conditions. Facts, conditions and situations may be interpreted differently by different people, which means that the same information may result in conflicting perceptions. Indeed, "policy problems are in the eye of the beholder" (Dunn, 1981). A policy problem can be seen as a situation where there is a gap between a normative standard and a perception of an existing or expected situation. In sum, a problem is not a given fact but a social construct.

What is the problem about? What values are at stake? What facts are the relevant ones? These are questions that arise when a problem is structured. *Problem structuring* has important implications for the policy-making process. Even what you call it is important. *The name* for a problem forms the beliefs about what public policy can change and what it cannot touch (Edelman, 1977).

The four stages of policy-making

The policy-making process can be divided into several distinctive stages. In sum, one studies first how policy problems arise and appear on the agenda of government decision-making, then how people formulate issues for action, next how legislative action follows, how administrators subsequently implement the policy, and finally at the end of the process, how policy is evaluated.

In the *first stage* the agenda is set which means that problems are selected, identified and defined. The fundamental question is whether or not there is a problem. *Agenda building* is the process by which demands of various groups are translated into items asking for the serious attention of public officials (Cobb *et al.*, 1976). The model distinguishes between two agendas: the public agenda, consisting of issues which have achieved a high level of public interest, and the formal agenda, consisting of items that decision-makers have formally accepted for serious attention. However it is not always that the policy-making process ends with a decision. "Non-decisions" frequently occur in the policy-making process, especially in the agenda-setting phase. A non-decision is a decision that results in suppression of a challenge to the values or interests of the decision-makers.

The *second stage* is focused on *formal decision-making* in which a particular policy is adopted. Here, a formal setting intended to change behaviour is established. It is important to emphasize that this stage includes everything from policy documents, like White Papers, which are background reports or "paper tigers," to strictly binding laws. It is noticeable that there is a much wider range of policy documents of varying degrees of legality in parliamentary systems in Western Europe than in the USA.

In the *third stage*, *implementation*, attempts are made to realize policy. According to *Webster's Dictionary* to implement means "to carry out: to accomplish, fulfil; to give practical effect to and ensure of actual fulfilment by concrete measures, to provide instruments or means of practical expression". In order to translate words into deeds it is necessary to have access to financial resources, personnel, organizational structure, etc. However, the activities undertaken in the implementation phase need not lead to the fulfilment of the policy objectives. As has been shown by ample literature on implementation, discrepancies between promise and performance frequently occur.

Figure 22.1. The scenes of policy-making. The parliaments, here the Estonian parliament building in Tallinn, are the centres of policy-making in democracies. (Photo: Lars Rydén.)

The policy-making process

The policy-making process starts with identifying a *problem* and giving it a name and putting it on the political *agenda*.

A *policy* is the principle way of dealing with the problem. Policy is described in goals, declarations, programmes, or reports from e.g. political parties or governments.

The *politics* is how to execute a policy, its *implementation* or realisation. It requires financial resources, personnel, and administration.

The four stages of policy-making

1. Agenda building – demands of various groups are given attention by public officials.
2. Formal decision-making – a particular policy is adopted by the parliamentary system.
3. Implementation – the policy is carried out in practical work.
4. Evaluation – the policy is followed up, monitored and analysed.

In the *fourth stage* policy is evaluated. In this phase the result of a public programme is assessed with respect to the intended and unintended effects. All sorts of activities undertaken during the policy-making process are evaluated. Mistakes are identified and explained and lessons for future policy-making are drawn.

However, the policy-making process is not necessarily linear. A major objection that has been raised to the stages model described above, is its view on implementation as a mere instrumental execution of earlier agreed policy. Instead it is argued that the shaping of a policy continues throughout the implementation phase (Bachratz and Baratz, 1970), and that the "real decisions" are rather taken when policy is realized, not when it is adopted or when policy-making occurs as bureaucrats attempt to implement vague legislation.

Problems, *policies* and *politics* may be seen as three independent streams which have their own dynamics and flow (Kingdon, 1984). Policy change is most likely to occur when the three streams are coupled. This tends to be the work of a policy entrepreneur who benefits from a short-term opportunity, a "policy window", to highlight a particular problem or solution.

Policy alternatives tend to be elaborated before the agenda is set (Kingdon, 1984). They may also occur in parallel. The "garbage can model" (Cohen *et al.*, 1972) sees the decision-making process as an *ad hoc* mixture of problems and solutions. The model is based on the assumptions that the value function is ambiguous, knowledge about the choice situation is uncertain and decision rules are complex and symbolic. In addition the stages model has been criticized for not being a causal model, for neglecting the fact that evaluations of existing programmes often affect agenda-setting and for having a top-down bias which implies that so-called street-level bureaucrats and other actors are excluded from the analysis.

Policy instruments

Broadly speaking, policy instruments are tools used by the policy-makers in their attempts to alter society. They address societal processes to change them according to the intention of the policy-makers. Technically, policy instruments are a set of techniques used by the executive power of a country, the governmental authorities. By them governments "wield their power in attempting to ensure support and effect or prevent social change" (Vedung, 1995).
Public policy instruments are generally divided into three classes:

- regulations,
- economic means, and
- information/moral suasion.

Regulation (also called *command-and-control* instruments) comprises a range of direct regulations such as standards, bans, permits, zoning use restrictions, etc. Direct regulations are institutional measures aimed at directly influencing the environmental performance of polluters by regulating processes or products used, by abandoning or limiting the discharge of certain pollutants, and/or by restricting activities to certain times, areas, etc. Within countries belonging to the OECD, regulation has traditionally been the most commonly used policy instrument in environmental protection. Regulations are described in Chapter 19.

The second approach is the application of *economic* instruments to create environmentally appropriate behaviour. The main economic instruments could be categorized as:

- charges and taxes (effluent charges, product charges, tax differentiation),
- subsidies,
- deposit-refund systems,
- market creation (emissions trading, liability), and
- financial enforcement incentives (non-compliance fines, performance bonds).

Economic policy instruments involve either the handing out or the taking away of material resources. In other words, economic instruments make it cheaper or more expensive to pursue certain actions. Economic instruments are described in Chapter 20.

The third approach is *information and moral suasion* aiming at changing an agent's behaviour on a voluntary basis. This could be accomplished via education, transfer of knowledge, training, persuasion, recommendation, and negotiation. One important instrument in this category is voluntary agreements between governmental agencies and private enterprises. This type of policy instrument is likely to gain importance in the future. Information and moral suasion policy instruments are described in Chapter 21.

According to the OECD (1994), a shift towards prevention and sustainability will require governments to use instruments such as negotiation with stakeholders and joint agreement and action plans between sectoral ministries.

Evaluation of policy instruments

Four central concepts in environmental policy are:

- effectiveness,
- efficiency,
- cost-effectiveness, and
- equity.

Effectiveness concerns the extent to which a measure, such as an investment, succeeds in reducing environmental impacts in relation to the set policy targets. *Efficiency* has to do with the extent to which the costs of a policy are justified in terms of its effects and if it maximizes the effects minus the costs (Semeniene and Zylicz, 1997). A *cost-effective* policy seeks the least costly method of attaining a specific environmental quality goal. *Equity* relates to the balance between costs and benefits across the parties concerned. Hence, it has to do with burden-sharing and fairness. It is difficult (but not impossible) to design policies that combine the notions of effectiveness, efficiency, and equity. As Weale (1992) aptly observes, "no country ... has discovered how to combine technical effectiveness with political responsiveness and economic efficiency. The solution to that problem still awaits discovery."

One policy instrument which offers an interesting opportunity to achieve both effectiveness and efficiency is emission trading or marketable permits. This controversial instrument was invented in 1968 by the Canadian economist Dales. The main idea behind this mechanism is that firms with the lowest marginal abatement costs should abate their emissions more than firms with the highest marginal abatement costs. The first steps in an emission trading scheme are, in general, taken by the government which defines the emission levels for a particular region and then fixes an amount of permits which subsequently are either sold to the highest bidders at auctions or distributed for free, so-called grandfathering. At this stage the government opens up the game for the market forces. The polluters participating in the scheme start to sell and buy their permits. Emission permits will be bought by those firms which have the highest opportunity costs. Emission trading is further described in Chapter 19.

Which policy instrument to choose?

Each type of policy instrument has its strengths and weaknesses. A major advantage of regulations is that they are most suited to effectively prevent hazards and irreversible effects. Furthermore, regulations frequently provide polluters with incentives to develop technology. Provided that there is effective

Figure 22.2. Policy instruments. Of the many policy instruments the public is most aware of taxes, especially the fuel taxes. (Photo: Lars Rydén.)

Figure 22.3. Policy instruments. Politics are traditionally based on command and control instruments, as the politicians most easily can introduce new legal regulations to protect the environment. (Photomontage: Magnus Lehman.)

enforcement, these instruments are able to achieve the desired environmental goals. The point is that enforcement is often problematic, because of the great number of control, administrative requirements, staff, legal procedures in case of non-compliance, and so on. A second drawback is that command-and-control instruments tend to become weakened by bargaining and negotiation between representatives of the polluters and the environmental authorities. Thirdly, regulations are expensive for society in that they are often not efficient in economic terms.

Economic instruments, such as environmental taxes and charges, minimise total abatement costs in that they constitute a permanent incentive to reduce pollution. Furthermore, they provide a source of revenue. However, a number of problems and uncertainties arise in connection with the use of these instruments. First of all, the rate of charges and taxes are not always set at a level that assures effectiveness in environmental terms. Secondly, charges and taxes may be inappropriate for controlling toxic and hazardous substances if the time lag is too long before use of the substances is curtailed. The best way to control these substances is by means of direct regulations and bans. Thirdly, there are distributive implications which must be taken into consideration when economic instruments are used. For instance, energy taxes may have negative effects on poorer households.

Voluntary agreements also have their pros and cons. On the one hand they offer flexibility and transparency. On the other hand, control by environmental authorities over actual implementation is minimal.

It should be noted that in real life policy instruments tend to come in packages. For example, regulations are almost always followed by some kind of information. Moreover, the application of policy instruments tend to require some kind of organisational arrangements, such as authorities, legal bodies, etc. The existing organisation partly determines what is possible to do.

The choice of policy instruments is also connected to an "administrative culture" that is quite different if the command and control or information and suasion dominate. What we see is that the shift towards prevention approaches and sustainability requires that governments use instruments such as negotiation with stakeholders and joint agreements and action plans to a much larger extent than traditionally, both within the governmental offices, that is between sectoral ministries, and between authorities and other stakeholders in society. This is even more apparent on the local level, where often the municipalities are not economically strong enough to implement a policy and thus need to agree with other actors, especially the business sector, to achieve practical results.

Outlook
Box 22.1

Building capacity for environmental policy

What is capacity building?

Capacity in environmental management relates to the abilities of a society to identify and solve environmental problems, and to the "process" by which those abilities are developed (OECD, 1994). This broad definition encompasses a wide variety of material and non-material factors, from visions and values, policies, and strategies, to the resources available to all relevant actors, and their will and skills.

The development of environmental management capacity is a complex process (Figure 22.4) that:

(1) is driven by usually conflicting organized actor groups, their resources, their ability to form alliances, to cooperate in identifying and seizing (or even creating) situational opportunities;
(2) depends on cultural, political and economic conditions, the environmental situation, and public awareness,
(3) is shaped by the nature of the problem to be solved, whether the problem is easy or hard to solve, which in turn depends on the kind of interest involved, the strength of the polluters concerned, its systemic nature, and its conventional or latent/creeping character, etc.

How to build capacity

The capacities for environmental policy and management depend on the strength, competence and configuration of governmental and non-governmental proponents of environmental protection.

Accordingly, a high degree of capacity in a nation would be characterised by a multitude of well-organized, skilled and committed environmental actor groups with well-established co-operative relationships; on well-resourced institutions and effective regulations with comprehensive and accessible monitoring and reporting systems; on a high degree of environmental awareness among the political elites, the general public, the mass media; and the (scientific, etc.) capability to interpret the information in a politically strategic way. In addition, a flourishing, innovative environmental business sector and a modern industry structure contributes.

The utilization of these capacities then depends on the strategy, will and skill of proponents and the situational opportunities This may consist of that a high-pollution sector is shaken by environmental scandals, and feasible solutions are available for the highly visible damages, as shown by publicly highly visible progressive environmental initiatives of international organizations and groups striving for a "greener" image. If these ideal conditions are met in a country with a sound level of welfare, good economic prospects and a general pro-innovation culture with a high esteem for post-material values, then success in environmental management would be unavoidable.

Lessons from cross-national research

Legal and governmental institution building is a precondition for effective public policies, and leads to a responsible and accountable political administrative system with a self-interest to address problems, increasing the chances for influence from civil actor groups.

The actual contribution of this institutionalization depends on various factors and the country studies record a broad range of quality in environmental institutions. The general trends indicate, however, an overall and substantial rise in institutional capacities:

(1) Increasing speed in general institutionalization and the spread of institutional innovations in almost all countries in the world.
(2) As a rule, a general expansion of existing capacities (resources, specialized staff, regulations, etc.), and only seldom a massive reduction; however, there are marked discrepancies in developing countries.

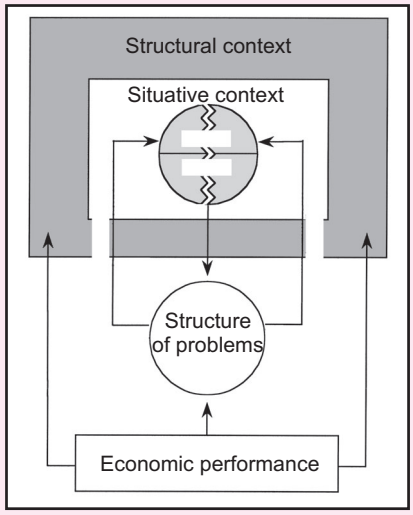

Figure 22.4. Determinants of Environmental Policy Performance. (Jänicke, 1998.)

(3) Increase in the powers and functions of environmental institutions in countries where initial institutionalization tended to be formal or symbolic in nature.
(4) The modernization (reorganization, renewal) of institutions, especially since the late 1980s, with the aim of increasing their efficiency, often in association with new public management strategies and in reaction to international developments and agreements (e.g., Agenda 21, sustainable development, national environmental planning); a process that also has taken place in countries with systems that have developed organically over a long period and which tend to oppose change, e.g., Britain, Japan and, in some aspects, Germany.
(5) "Ecologicalization" of a multitude of institutions and organizations, and of scientific disciplines, in the developed countries but also slowly progressing in developing nations (India, Costa Rica, Vietnam)
(6) An increase in capacities generated by existing environmental institutions themselves by innovative means, e.g., network formation (e.g. International Association of National Environmental Expert Councils) and informal practices (e.g. voluntary environmental cooperation).

Democracy and Environmental Capacity Building

The most important precondition for building environmental management capacity is the support of environmental proponents. To address environmental problems publicly requires democratic institutions and rules (Lafferty & Meadowcroft, 1996). This is particularly important for actors with preferences and problem-solving concepts which do not conform with the prevailing norms.

The great importance of democratic system structures for effective environmental policy is evident in many of the countries studied. In Eastern European countries and Latin American dictatorships significant capacity building and environmental effects occurred only after a change in political system. In countries such as Poland, Hungary, Czech Republic, Bulgaria, and Russia environmental conflicts and environmental proponents have contributed to changes in the political system. Environmental organizations often provided the only platform for openly criticizing the deficiencies of the political system.

Helmut Weidner and Martin Jänicke*

THE POLICY-MAKERS

POLITICIANS AND CITIZEN ORGANISATIONS

Civil society – the role of citizens

The key actor in environmental protection is the individual. In an open, free and democratic society the individual has several opportunities to exert influence. The most important ways are the following:

- *Political vote.* An important way of acting politically is to vote in elections at the local, regional and national level. Another way is to participate in referendums (for example, in 1980 Sweden had a referendum about the future of nuclear power). Political participation may also include activities such as writing open letters to the press and contacting politicians.
- *Economic vote.* As a consumer in a market economy, the individual can choose to buy the least environmentally harmful products, or, in other words, to "vote with the wallet." If so-called green products are not available in the shops, consumers might contact producers, environmental organisations, and consumers organisations to discuss how these products could become available.
- *Work for voluntary organisations.* A third possibility for the individual is to join a non-governmental organisation involved in environmental protection. In Agenda 21 it is emphasised that these organisations "play a vital role in the shaping and implementation of participatory democracy. Formal and informal organisations, as well as grassroots movements, should be recognised as partners in the implementation of Agenda 21".

It is important that local, regional and central environmental authorities actively stimulate citizen participation. One way of doing that is to provide the citizens with education. Another way is to ask them for advice and to delegate more and more tasks to them. The contacts between authorities and citizens should become more frequent. The policy-makers should constantly think about how they may better stimulate and help citizens actions. As Bill Clinton once said: "We cannot ask Americans to be better citizens if we are not better servants".

Science

Science has a pivotal role in the political process. The environmental movement has always been supported by researchers. In the early 1960s several key discoveries were made by scientists that influenced politicians to add environmental issues to the political agenda. The sequence of events have been very much the same later on. Scientists have discovered and explained environmental impacts that otherwise would be difficult to grasp, especially as the impact becomes less immediate, more delayed and more distributed. Among such issues are acid rain, climate change, and the depletion of the ozone layer.

In the West this is a well documented story. Researchers played and play important roles in the generation, dissemination and evaluation of policy ideas. In many countries in Eastern Europe, actors affiliated with the scientific sector grew in importance in the 1980s and became one of the most important environmental advocates. The research community produced ample evidence about the environmental crisis, which were presented in a large number of reports and frequently organized seminars and conferences. Many of the researchers were members of academies of sciences.

In the 1990s, the role of the scientific sector diminished in Eastern Europe. It has lost political status, the economic support from the state was reduced and

Civil society

Civil society has its place between individuals and the state. But what types of actors could be included in the concept of civil society? Among the candidates might be: social movements, churches, charities, pressure groups, organised interests, political parties, and study groups.

It is difficult to define civil society in a precise way. According to some analysts, economic actors and *state*-initiated social organisations are part of civil society, according to others they are not.

Often one differs between three different groups: the state, the corporate sector or business, and civil society.

Figure 22.5. The role of scientists. The biological scientists played an essential role in the liberation movement in the three Baltic states in the 1980s. Prof. Hans Trass, botanist from Tartu University (to the right in this picture), was one of them. He is here together with colleagues from Tallinn Technical University and the Baltic University.

there was a brain drain to the private sector. In Poland, total expenditure on science was approximately 0.8% of the GNP in 1997, half as much as the average for countries in the European Union. The Ministry of Environmental Protection in Poland concludes that it is possible to notice some symptoms of a research crisis in Poland. This crisis is revealed in reduced employment in the scientific sector, the disappearance of highly qualified young staff, inadequate equipment and inefficient cooperation between scientific centres and enterprises. This weakening of the environmental research sector, which is evident also in Western Europe, will lead to a weakening of the situation for environmental policy.

Media

Media has a pivotal role in the political process in most societies. The media have even been called the "third power," then meaning that the first power is the government and the second the legislative power, the courts. No politicians can afford to neglect the media in an elective democracy since he or she depends on it to be re-elected.

Good journalists are able to highlight environmental issues very efficiently. In particular this has been efficient in cases when individuals or even entire cities have been badly damaged by bad environmental performance, such as emissions from factories or poisoning of water. A case in point that is described more in detail in Chapter 20 is the Hallandsåsen case where a railroad constructor in Sweden poisoned both workers, animals, and household water by a chemical used carelessly in sealing the railroad tunnel. Media were there to report from the event and authorities acted immediately. Many similar stories can be told about poisoned fish, destroyed forests, threatened nature reserves and so on.

The activities of the media both inform and influence the citizens and alert politicians as well as authorities to act. The awareness of environmental issues increases as well as the knowledge and understanding. Media has played an outstanding role in placing environmental issues on the agenda in the countries in Western Europe.

Media, as well as the other actors in the political process, can be manipulated, e.g. being influenced by owners of polluting industry. Democratic societies have implemented several mechanisms to safeguard the independence of the media. This includes e.g. the protection of informants and the separation of the editors and the owners. A far more severe restriction is that the media publishes issues that the public is interested in, and if environmental issues do not have enough publicity value they will be less visible.

Figure 22.6. Media. Visibility of environmental issues is a key component of the political process. The publication in spring 2002 in the largest Swedish newspaper Dagens Nyheter of half a page on the overfishing of cod in the Baltic Sea and the too high level of dioxine in fish was followed by an intense debate in newspaper, radio and TV that pushed the responsible minister to act.

Trålare rensar kuste

Dioxinet avgör fiskets framtid

Så här har fisketrycket ökat i västerhavet

Här är de hotade fiskbestånden

Review
Box 22.2

Environmental non-governmental organisations, NGOs, in the Baltic Sea region

The Danish Society for the Conservation of Nature, DSCN (Danmarks Naturfredningsforening), is a private organization consisting of 270,000 Danes committed to the protection of nature and the environment. The Danish legislation provides DSCN a special legal standing on issues concerning nature and the environment, and thus DSCN has the right to appeal decisions made by local or regional authorities if those decisions do not take into account environmental considerations. DSCN was founded in 1911 through the efforts of active citizens worried about the degradation of scenic landscapes and concerned scientists. These efforts have given rise to the most influential NGO in Denmark. DSCN has been actively involved in creating and developing a majority of regional nature conservation proposals for the 25 Danish Nature Conservation Districts.

The Swedish Society for Nature Conservation has a role that is similar to its Danish sister organization. It is the largest green NGO in the country with more than 250,000 members. It is very influential in politics and can afford to develop a considerable expertise through both part time and full time employed experts. Important issues are nature conservation, energy issues, green labelling of products in shops, and environmental certification.

The World Wide Fund for Nature, WWF, has a strong position in Sweden, but is also present in several other countries in the region. WWF has five major activity areas, each of them concerned with a special kind of biotope, except for one that is concerned with youth, children and education. WWF has a considerable concern for the Baltic Sea and region, and made important contributions to e.g. the protection of seals and white-tailed eagles.

The Finnish Society for Nature and Environment, Natur och Miljö (NoM), is the nature conservation society for the Swedish speaking minority in Finland. NoM also has 17 municipalities and about 50 organizations as members. The Swedish speaking minority lives along the coast and in the archipelago, a fact that has influenced the activities of NoM during its more than 25 years of existence, and in the 1990s the focal point has been the protection of the sea and archipelago.

Bund fur Umwelt und Naturschutz Deutschland, the Organization for Environment and Nature Protection, shortly BUND, was founded in 1975 and covers the whole country with its activities. The organization is politically independent. The basic work is done by many small groups in villages and towns in all parts of Germany. There are more than 200,000 members in BUND. Young members join the independent youth organization BUND Jugend. The activities of BUND cover a wide spectrum: practical nature protection is done when observing rivers and lakes, protected areas, plants and animals. It is considered important to inform the public about environmental problems and solutions through production of information materials, organization of exhibitions, seminars, education of children and much more. As a large organization, BUND does much lobby work in the ministries and state administrations.

The Polish Ecological Club (Polski Klub Ekologiczny or PKE) is a nationwide non-governmental organization whose aim is to improve the environmental situation through public awareness campaigns, environmental education and national and regional lobbying of the public and private sector. PKE was founded in 1980 in Krakow as the first independent environmental organization in the eastern bloc. Since the return of democracy, PKE has continued to pursue its environmental agenda. PKE is a grassroots membership organization with a democratically elected board. The nationwide organisation consists of 14 regional chapters and over 120 local circles.

Figure 22.7. NGO projects. The WWF, Sweden has supported Hel Marine Station, Gdansk University in a project aiming to reintroduce the grey seal in the southern Baltic Sea. Three large seal basins have been built at the marine station. The "Seal-arium" is a popular tourist attraction but in fact serves several purposes – to increase environmental awareness, support environmental education, as well as research. During spring 2002 two seals from the station were released in the Baltic Sea. (Photo: Lars Rydén.)

The Estonian Green Movement (EGM) is an environmental NGO which uses, political, economic, ecological and nature conservation means to democratically influence Estonian society. EGM was founded in 1988. The thousands of activists within the EGM network have achieved their goals through a variety of methods, for example, protest meetings, marches, and demonstrations, as well as conferences and seminars. Initially, EGM was both an environmental NGO working towards a "healthier" environment at the same time as it was a crusading political movement for democratization and decentralization of the Estonian society. Today it is of smaller importance.

The Environmental Protection Club of Latvia (VAK) is a union of people with a common interest in restoring and protecting the environment. For VAK "the environment" is not a term which is restricted to nature; it also includes social and spiritual issues. VAK was founded in 1987 and it was the first non-governmental organization that was formed in Latvia in the 1980s. VAK has 50 local branches which have about 3,000 members of which some 500 are active. After a period with weak interest in the environment at the end of the 1990s, it again grew in importance.

The Lithuanian Green Movement (LGM) is the main non-governmental organization in Lithuania working with environmental problems related to the Baltic Sea area. The Baltic Sea Secretariat of LGM works on issues oriented towards water pollution, and co-ordinates and supports non-governmental education.

Greenpeace is a non-profit organisation, with a presence in 40 countries across Europe, the Americas, Asia and the Pacific. To maintain its independence, Greenpeace does not accept donations from governments or corporations but relies on contributions from individual supporters and foundation grants.

As a global organisation, Greenpeace focuses on the the most crucial worldwide threats to our planet's biodiversity and environment. Greenpeace is quite active in the Baltic Sea region.

Jeannette Hagberg

Environmental organisations and the green movement

Interest groups which promote protection of the environment in the countries in the region have played an important role in shaping environmental policy. Especially in the Nordic countries the societies for the Conservation of Nature were formed already in the first years of the 20th century. In Sweden members of parliament were among the most enthusiastic environmentalists and that is one explanation why they were from the very beginning influential e.g. to create the first national parks.

The associations often have defined policies and play important political roles in several ways:

(1) as pressure groups; they are today often part of the policy-making process itself, e.g. by being represented in commissions and investigations. Otherwise they may indirectly – through the media – and directly by writing letters and making approaches to politicians, state their opinion on current issues.
(2) through information to the public and their members, they form an important part of the increase of knowledge, understanding and public awareness on environmental issues.
(3) through practical projects which have a direct effect and often also demonstrate what can be done.

The western environmental organizations are quite influential. Some of the most important organizations in the Baltic Sea region are reviewed in Box 22.2.

The core of national policy-making – the parliaments

In a parliamentarian democracy parliaments have the authority to legislate, tax the people, and appoint the government. It is the parliament that constitutes the core of policy-making as the elected members of parliament shape the policy of the country, including environmental policy.

There is a prehistory of politics of environmental protection that should be mentioned. This includes the concern by some individuals for nature which resulted in the creation of protected areas, national parks, and protection of individual species in the first part of the 20th century. But it was not until the 1960s that environmental issues started to get a more visible place on the political agenda. The alarms and arguments of the early environmentalists influenced the political debate and led to the first important decision in the field of environmental protection.

The 1970s saw a considerable increase in interest and concern for environmental issues in society. As a result several political parties with environmental protection as the major political programme were created, the Green parties (see Box 22.3). In the beginning these were small and were not elected to the parliament. Still they were influential. They forced the established parties to include more environmental issues in their programmes so as not to loose voters to the Greens. The Greens were also elected to local assemblies in many municipalities and counties. Germany was the forerunner. Here the first (regional) green parties were formed in some of the Bundesländer already in the early 1970s, and some years later a federal green party (Die Grünen) was formed. The party in Sweden was established in 1981 and entered the parliament in the late 1980s. When entering the Greens were obviously in opposition, but members of parliament are influential also in opposition especially through the work in committees. Of the more established parties in general the left side and the centre have strong environmental policies, although the issues of environmental protection is on the agenda of all parties today.

The influence of environmental policy is still increasing. In 1998 Die Grünen entered the government in Germany in coalition with the social democratic party, SPD. In 1998 in Sweden Miljöpartiet De Gröna together with the Left party made up a parliamentary majority with the largest party, the Social

Coalition Clean Baltic, CCB
a Baltic region-wide NGO cooperation

Coalition Clean Baltic, founded 1990 in Helsinki, has gradually developed in the Baltic Sea region, through cooperation between the 25 CCB organizations, coming from nine Baltic region countries. CCB's overriding goal is the protection of the environmental and natural resources of the Baltic Sea area.

Since 1991 CCB has been an observer within HELCOM (Baltic Marine Environment Protection Commission). Of special importance has been to follow the implementation of the Baltic Sea Joint Comprehensive Environmental Action Programme (JCP), and the "Public Awareness and Environmental Education" part.

CCB has developed a number of projects in the region mentioned below.

The *ecological engineering* projects in Estonia, Lithuania, and Poland, attempts to find out the potential of using wetlands, soil-filters, bioponds, etc., for waste water treatment to mitigate pollution from human activities. These small and medium-scale solutions, compared to traditional techniques used today can many times be a very cost-effective way of solving the environmental problems with human waste. The results are reported in the book "Good examples on ecological engineering in the Baltic Sea region," and in an exhibition.

In a number of *River Watch* activities in Estonia, Latvia, Lithuania, Poland, and Russia, CCB promotes the work for increasing public awareness of the water environment and water quality.

The project *Protecting the naturally spawning Baltic salmon* lobbies the regional governments to introduce a temporary stop to all fishing of wild Baltic salmon, in accordance with the Convention on Biological Diversity, and article 15 of the 1992 Helsinki Convention.

CCB protests against *Harmful economic activities in the Baltic Sea Area*, include industrial production, agricultural runoff, and transportation activities, especially the planned construction of oil terminals in southeastern parts of the Baltic Sea, with its increased risk for oil spills.

To protect the unique archipelago areas in the Baltic Sea CCB promotes *the establishment of the total archipelago area as a World Heritage Site*. The first step for such a protection has been to prepare a proposal for nominating parts of the Swedish archipelago as a World Heritage Site, drafted by the Swedish Society for Nature Conservation.

Jeannette Hagberg

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Box 22.3

Green parties in the Baltic Sea region

Germany (Die Grünen). The German Green Party was founded in Steinburg/Schleswig-Holstein in 1977 and took part in the local election in 1978. It received 6% of the vote and because of this success, many people were encouraged all over Germany to form a Green Party in their own region. By 1980, local Green parties existed in all German Länder. The federal Green Party came to life in Karlsruhe, in January 1980. Although the party managed to receive only 1.5% of the votes in the federal election in October 1980, the Green Party of Germany continued to build up its structures and remained a stable component in the political establishment of Germany. In 1983 the Green Party managed to enter the Bundestag with 5.6% of the votes and improved this result in 1987 with 8.3%.

In East Germany, the independence movement was mostly promoted by a citizen movement (Bürgerbewegung Bundnis 90), combining a broad spectrum of people. After reunification of East and West Germany it was this movement that united with the German Green Party in 1993. Discussion about this decision still continues in Germany, as many members of the Bundnis 90 left their party and joined with other parties, mostly the conservative or socialist party.

In the 1990 election the Greens received only 4.8% of the votes. However, the East German Grüne/Bundnis 90 received 6% and entered parliament, and the Green Party was represented by them for the next four years. In 1994 the Greens managed to re-enter the Bundestag with 7.3%. After the 1998 elections the Greens formed a governmental coalition together with the social democrats.

Sweden (Miljöpartiet de gröna). The Swedish Green Party was founded in 1981. By 1988 Miljöpartiet had gained wide, grassroots political experience, from which they could recruit regional and national candidates for the election campaign. With 5.5% of the votes, 20 parliamentarians entered the Swedish parliament in 1988. In 1991, they failed to enter parliament with only 3.4% of the votes. On the local and regional level, they lost about half of their seats. Most probably it was the increasing discontent with the EU membership in public opinion that brought Miljöpartiet back in Parliament in 1994 with 20 seats and 5.02% of the votes, being represented in all but one regional government and having 616 seats in local councils. In 1998 Miljöpartiet and the Left party supported the Social Democrats to create a majority in the parliament, a situation that has continued after the 2002 election.

Finland (Vihreä Liito). In 1983, two Green MPs were elected (out of 200 in total) and this number was even doubled in the federal election of 1987. Even in the local election of 1988, only independent candidates ran for the Green Party. A long discussion about the pros and cons of a normal, formal party resulted in the registering of Vihreä Liitto in 1988, but it still took another two years, until the first comprehensive Green Manifesto was drafted and approved. In the election of 1991, Vihreä Liitto managed to gain 6.8% and had ten MPs in parliament. Another success was the local election of 1992, when the Green Party won 343 council seats with 6.9% of the votes. In the federal elections of 1995 Vihreä Liitoo lost one seat in parliament after gaining 6.5% of the votes.

Denmark (De Grönne). De Grönne started off as a party in 1983, introducing the idea of a "citizens salary" to the public. This is aimed at freeing people from the unemployment benefit system and the social security system, which are both considered to generate inactivity. In the Folketing Elections of 1987 and 1988 De Grönne received only 1.3% and 1.4% of the votes and thus stayed out of Parliament. With 2.5% of the votes in the following local elections De Grönne remained in some local parliaments, but in the federal elections of 1990 the votes for the Green Party reduced further to only 0.75%. Although De Grönne remained in some local parliaments, they only managed to gain less than 1% in the next national elections.

Poland (Polska Partia Zielonych). The Polish Green Party was established in Krakow in December 1988 as the first Green party in the socialist bloc. It had about 10,000 members and a strong youth section. After the first free elections on the local level in Poland in 1990 the Polish Greens achieved more than 10% in several regions and even had a few Green mayors. After this strong beginning the party rapidly declined. Presently, there are several small green parties in Poland but none of these have any influence on the national political scene.

Lithuania (Lietuvos Zalioji Partija). Established on July 15th 1989, and registered in August 1990 it gathered many politically active persons who held close contact or became members. In the first elections they managed to gain four seats in the Parliament (Atkuriamasis Seimas) and 44 persons in the local municipalities in various towns. Before the municipality elections in 1995 open quarrels broke out in the party. They did not keep any seats in local municipalities or in the federal Parliament.

Latvia (Latvijas Zala Partija). The Latvian Green Party was founded in January 1990 and is represented all over Latvia. The party is represented in the federal parliament with five members (out of 100) and in many local municipalities. As all other Green parties in the Baltic States, the Green Party of Latvia is the oldest legal party in their country. Their roots lie in the Vides Aizsardzibas Klubs (VAK), a strong environmental movement already active in Soviet times. It played an important role in the independence movement. At the beginning of 1989 the role of the VAK decreased and it began to fall apart into many different groups, one of them was the Latvian Green Party.

Estonia (Eesti Roheliised). As in the other Baltic States, the Estonian Green Party (EGP) is the oldest party in the country. They united with a second Green Party in Tartu, in December 1991, and were member of the EFGP since 1992. The EGP had no or very few members in Parliament in the late 1990s. By the public, environmental issues are not considered to be very important. The last public polls have shown that the EGP has support of only 1% of the voters.

St. Petersburg (Russian Interregional Green Party). The Russian Green Party was founded in St. Petersburg in May 1991. Like in Poland, the Green Party had a strong beginning. But as in Poland, the size of the Green Party decreased rapidly at the end of the 1990s. The Green Party broke down completely (no specific date is known), and was then re-established in St. Petersburg. In 1997, the Green Party of St. Petersburg managed to build up new branches in four regions of Russia and renamed itself, as required by Russian law, the Interregional Russian Green Party. The strongest branch in St. Petersburg has about 250 members. The party has about 400 members in total.

Stefan Hansen

Figure 22.8. The Swedish Green Party, Miljöpartiet campaigning for the 2002 parliamentary elections. (Photo: Lars Rydén.)

Democrats, and formed the politics after negotiations, however without any ministerial positions. Also in other countries the Greens are important and in general Red-Green coalitions had a strong position in Western European policy at the turn of the century.

The developments in Central and Eastern Europe have been different. Environmental issues played an important role in the independence movements in the late 1980s and were thus highest on the agenda in many countries, especially in Estonia, Latvia, and Lithuania. In Estonia, e.g., the Estonian Green Movement, EGM, quickly evolved into a nation-wide association with member organizations in every county and large town. The 1990 elections for the Estonian Parliament was a giant victory for the environment – EGM gained eight seats in the Parliament and tens of EGM candidates were elected into the local governments. In addition, the seat of Minister of Environment was offered to the chairman of EGM, Prof. Toomas Frey. In the late 1990s, however, EGM was no longer an active political party: its political branch was united in 1991 with the independent Estonian Green Party. Since then, EGM has acted only as a non-governmental organization.

In Poland the Solidarity movement had a considerable membership among ecologists and biologists and was able to form a very strong environmental policy as soon as it entered the political establishment in 1989. Soon after the systems change environmental issues lost their prominence while economic matters took over the high priority position. Still environmental questions have remained on the agenda and much has been accomplished in practice since then.

Implementation

The central questions asked in implementation analysis are: What are the crucial components of a law in helping to ensure successful implementation? Who in the government and the public administration should be made responsible? What kinds of resources should be devoted to the effort? What are the obstacles and barriers for successful implementation? Are the appropriate technical and social capabilities available?

Two American political scientists, Daniel Mazmanian and Paul Sabatier (1989), have proposed how a public programme ought to be constructed in order to be implemented successfully. According to them, it ought to:

1. be clearly formulated and have a specified goal;
2. be built on a correct assumption about cause and effect;
3. provide the executor with sufficient legal means to realize the programme;
4. be designed in such a way that the target group behaves as was intended;
5. be entrusted to a competent and motivated management group;
6. have support from organizations representing the target group;
7. have support from central politicians and officials;
8. not come into conflict with other official programmes;
9. not be realized if the socio-economc condititons are unfavourable;
10. be provided with sufficient financial resources;
11. be entrusted to official organisations which have a positive attitude to the programme; and
12. not be designed in such a way that it comes into conflict with the judiciary.

IMPLEMENTING ENVIRONMENTAL POLICY

The government level – ministries and environmental protection agencies

The government has the task to execute and implement the policies decided by the parliament. This is carried out by the responsible minister and his or her ministry. At first environmental matters were distributed to ministries of agriculture, industry, etc., and it was not until the 1980s that the environment was given its own portfolio, a special minister. In Sweden, e.g., the Ministry of Environment and Energy was established in 1986. The decision to make the Minister of Environment in charge of energy policy was disputed and led later to the transfer of energy issues to the Ministry of Industry in 1991.

The ministries establish their special agencies, authorities with special tasks within a defined area. These agencies are typically very much older that the special ministries while they originally belonged to a different ministry. The Swedish Environmental Protection Agency (SEPA) was established in 1969. It played a crucial role for Sweden's early efforts to protect the environment by providing scientific research, co-ordinating a comprehensive point-source abatement programme in the 1970s, controlling separate companies and prosecuting those who did not comply.

The profile of SEPA changed in the 1980s and 1990s by increasing its focus on research and the provision of information. The agency also started to perform multi-year assessments of the environmental situation in Sweden. These reports provide the background for action programmes which are developed on major areas of concern, such as fresh water conservation, air protection and control of chemicals. In the late 1990s the possibility of SEPA to fund research has diminished drastically, as this was seen as a task for the research councils.

In Germany, the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety was set up in 1986. It has the general responsibility for the elaboration and co-ordination for environmental policy. The Ministry is supported by its agencies the Federal Environmental Agency, the Federal Research Centre for Nature Protection and the Federal Office for Radiological Protection. The Bundesländer bear responsibility for implementation of environmental protection laws. The Länder have the freedom to choose how the laws should be implemented and the appropriate institutional form of enforcement. Co-ordination between the activities carried out by the Länder and the federal level is achieved at the Conference of Environmental Ministers formed by the Federal Minister and the environmental ministers at the Länder level.

In Poland, the Ministry of Territorial Management and Environmental Protection was established as early as 1972. This ministry was reorganized several times in the 1970s and 1980s and in 1989 it became the Ministry for Environmental Protection, Natural Resources and Forestry. Presently it is called the Ministry of Environment.

The National Fund for Environmental Protection and Water Management, established in 1989, is the single largest financing organization for environmental protection in Poland. Its main source of income is fees and penalties for the use and pollution of the environment together with repayment of instalments of the loans granted by the fund. The fund supports environmental protection projects via, grants, soft-loans and investments.

Needless to say, it is extremely important that national environmental policy is not adopted and implemented in isolation of other policies. Sustainable development cannot be achieved by the sole efforts of the ministry of

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Box 22.4

The role of municipalities in environmental work

In *Denmark*, 11 out of the 14 counties and 134 out of the 275 municipalities are actively involved in Local Agenda 21 (LA21) processes. The municipalities try to involve all community sectors by means of education, campaigns, conferences, partnerships, etc. This process has made it clear among elected representatives and the public that there is a need for changes in behaviour in society. The national government has a very positive attitude towards the process and has set up a contact group with representatives from the state, the counties and the municipalities. Both the National Association of Local Authorities in Denmark and the Association of County Councils have formed co-ordination groups and networks for their members.

In *Estonia* at least 50 of the 254 local authorities have initiated local Agenda 21 processes. The local authorities have involved different community groups in the process. The Tartu action plan has resulted in the appointment of an official LA21 administrator in the municipality and an article in the Statutes of the City. Pärnu implemented a Local Environmental Action Plan where seminars were organised to promote the concept of Agenda 21 and achieve exchange of experience between local authorities. The Association of Estonian Cities, AEC, co-ordinates a network of local authorities, the 15 counties - which have the main responsibility for environmental protection, development and implementation of the environmental policy - and other organisations. The AEC disseminates information and assists the local authorities in project financing and management.

In *Finland* at least 193 of the 452 municipalities have initiated LA21 processes. Municipalities are directly responsible for environmental issues and also perform some authority tasks delegated by the state. More than 30 cities have signed the Aalborg Declaration and joined the European Sustainable Cities and Towns Campaign. Integration of environmental issues into the decision-making process and cross-sectoral co-operation has been improved in many municipalities. A special project has been launched by the Association of Finnish Local and Regional Authorities (AFLRA) where 50 municipalities are working on Agenda 21 issues on a broad and cross-sectorial basis.

In *Germany*, responsibility for environmental policy rests in different ways with the 426 districts (Kreise), 16,000 municipalities (Gemeinden) and 1,200 cities (Städte) depending on the State. The German municipalities and counties work with environmental and sustainable development issues in their daily work. More than 200 towns and cities and 20 counties, or about 10% of the German towns and regions, are involved in LA21 processes through, for instance, round-table discussions with different stakeholders in society. Usually an officer of the local administration co-ordinates the elaboration of a local Agenda 21. A wide scope of action plans has been elaborated and more than 60 city councils and 20 county councils have decided to implement local Agendas. The Federal government provides financial assistance for research projects for implementing Agenda 21.

In *Latvia* there are 491 rural communes, 76 cities, and 26 counties. Nine regional environmental protection committees are responsible for monitoring, inspection, enforcement and licensing. There is also a national environmental fund collecting charges from activities that are harmful to the environment and taxes from the use of natural resources.Several cities and communities work actively with environmental issues. The city of Jurmala, which is one of Latvia's major resorts, was in 1998 eligible for the Blue Flag certification for beaches.

In *Lithuania* a recent amalgamation process has resulted in 56 municipalities (12 cities and 44 regions). The level of municipal activity varies. They are obliged by law to organise the implementation of national legislation, prepare and implement environmental protection plans and projects within their territory and to some extent allocate natural resources. The municipalities may, in agreement with the government, set standards stricter than the national standards. Some 70% from the environmental charges are transferred to Municipal Environmental Funds. State subsidies are given for example for the expansion of waste water treatment plants.

In *Poland* there are 2,460 municipalities. The 16 provinces are governmental authorities on a regional level. A major administration reform was carried out in Poland in 1999, creating a self-government unit called powiat covering the area of several present municipalities. Agenda 21 processes have been initiated in at least 25 municipalities. The Gdansk region has elaborated an ecological policy based on discussions between the City council and trade unions, scientists, ecologists, agriculture associations and other community groups. This process has resulted in plans for short, medium and long-term perspectives. In a second step, a dialogue has been initiated between citizens in the city districts. This dialogue will result in a second edition of the Local Agenda 21.

In *Russia* the system of local and regional government is complex with regional variations. The first level of self-government is the cities and towns (poselki). The second level below cities consists of city districts. The level below towns consists of village councils (selskie sovety) and rural districts (raiony). There are 15 republics, 35 regions and 49 counties (oblasty). In the Baltic Sea area Karelia is an autonomous republic. Nine oblasts are found wholly or partly within the drainage basin. The largest are Kaliningradskaya, Leningradskaya, Pskovskaya, and Novgorodskaya oblast. The city of St. Petersburg has the status of a region. On the oblast, city and district level territorial committees for regional environmental control have been established. They in their turn co-operate with local authorities.

In *Sweden* self-government units exist both on the local and regional level. There are 289 municipalities and 23 county councils. Municipalities are responsible for a wide range of environmental tasks, some delegated from the state. County councils are mainly responsible for health care and regional development and only support environmental development on the regional level. Virtually all of the Swedish municipalities have initiated Agenda 21 processes to some extent. Very broad-based, in-depth work on Agenda 21 is performed by about 60 municipalities. One example is the city of Växjö, in the southern part of the country, which is co-operating closely with the largest environmental organisation in Sweden, the Swedish Society for Nature Conservation. The municipality has decided to abandon the use of fossil fuels in all municipal services and activities. There is an on-going dialogue between environmental organizations, the inhabitants and the municipality of Växjö.

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environment but must be the commitment of every ministry, thus, the whole government.

The role of local and regional authorities

The conditions and the prerequisites for local and regional authorities vary greatly between the countries in the Baltic Sea region. The Nordic countries have a long tradition of local self-government. Municipalities and counties are financially strong and they have already carried out investments in environmental infrastructure, such as sewage treatment plants, district heating and waste management.

Municipalities in the Nordic countries are responsible for environmental issues on local level. The counties are solely responsible for regional environmental issues. Regardless of the range of responsibilities resting with municipalities in different countries, one thing they have in common is that they work close to citizens and close to the problems and needs within their territory.

The Nordic countries and Germany have been quite successful in reducing emissions from the major pollution sources, but these solutions have not always been sustainable but rather large-scale, end-of-pipe solutions. The media and the popular movements have paved the way for a relatively high degree of awareness in environmental and democratic issues. It has been natural for municipalities in the Nordic countries to use Agenda 21 as a means of finding sustainable, small-scale environmental solutions and to come to terms with the high level of consumption.

In Germany the principle of local self- government for towns and villages is enshrined in the constitution, but the system differs from the Nordic countries in that Germany is a federal country with strong States or Länder.

The Central and Eastern European states around the Baltic Sea have just started to implement local and regional self-government. In most countries the municipal entities are too small to generate sufficient revenue to perform all tasks and to keep a broad base of competence. In many cases only the larger cities have resources enough to carry out environmental projects. There is great need for investments in infrastructure such as sewage treatment plants. These countries are less decentralised than the Nordic countries and Germany. Reforms in the territorial administrative division is under way in most countries and amalgamation of municipalities and creation of regional self-government levels can be expected.

There is no need for the Central and Eastern European countries to repeat the mistakes made by Western European countries. For example, the increasing consumption and use of packaged material is creating problems for municipalities who find that the existing refuse dumps do not have sufficient capacity. The deposit refund systems have disappeared for a number of goods, such as paper, after the transformation to a market economy. Some pioneers are trying to solve the problem by raising local consumer awareness and promoting separation of waste, recycling and composting. This is of course a relatively slow process, often hampered by the lack of infrastructure (for instance companies buying and recycling plastic and metal cans), lack of support from the national government and lack of central financial policy incentives.

Permits, inspection, and control

An important part of the implementation process is the process of legal decisions on permits to conduct an activity that is (potentially) harmful to the environment, and the following control that decisions and in general legal regulations are respected.

The decisions on permits are taken either by the local authorities or by special courts. In Sweden it is managed by the National Franchise Board. This is an administrative court in Stockholm which grants permissions (concessions) for

International cooperation between cities for environmental protection

The International Council for Local Environmental Initiatives, ICLEI, was established in 1990 through a partnership of the United Nations Environment Programme, the International Union of Local Authorities (IULA), and the Centre for Innovative Diplomacy. ICLEI maintains a formal association with IULA. The purpose of the ICLEI is to serve as an international clearinghouse on sustainable development and environmental protection policies, programmes, and techniques being implemented at the local level by local institutions. Its role is also to initiate joint projects or campaigns among groups of local governments to research and develop new approaches to address pressing environmental and development problems. The ICLEI also organises training programs and publishes reports and technical manuals on environmental management and Agenda 21 in several languages.

The European Sustainable Cities and Towns Campaign was launched in 1994. The Campaign is sponsored by DG Environment of the European Commission and benefits from the support of ICLEI, Eurocities, UTO, WHO-Healthy Cities, the City of Aalborg and the Urban Environment Expert Group. The objective of the Campaign is to promote development towards sustainability at the local level through Local Agenda 21 processes, by strengthening partnership among all actors in the local community as well as inter-authority co-operation. About 900 European cities, towns and counties have up to early 2001 signed the Aalborg Charter and thereby joined the Campaign. There is also a yearly competition - the Sustainable City Award.

The Union of the Baltic Cities, UBC, is an organisation open to all the cities in the Baltic Region. It was founded by 32 cities and had (in 2001) 99 member cities in all the Baltic region countries and Norway. The UBC is striving to achieve cohesion and a better standard of life for the citizens of various cities located in the Baltic Sea basin. The UBC is working actively with environmental issues through its Commission on Environment, chaired and coordinated by Turku/Åbo. The UBC aims at increasing co-operation and the exchange of experiences and know-how between cities in the field of environmental protection. UBC's Commission on Environment is currently working with projects concerning municipal environmental auditing, archipelago issues, contaminated soil, institutional strengthening and human resource development.

Figure 22.9. Local politics. The various political bodies in the municipalites have key roles in creating and implementing environmental politics. Here the environmental committee meets with interested inhabitants in Uppsala. (Photo: Inga-May Lehman Nådin.)

38 specified kinds of establishments. Also the 24 counties and the 289 municipalities grant permits for polluting activities.

The supervision of environmental performance is often divided between authorities, and often very different in different countries. The local and regional authorities, the environmental protection agencies or special authorities are in charge for different areas. In Sweden the National Food Administration is responsible for supervision of the municipal drinking water quality and the National Chemical Inspectorate is in charge of chemical safety. The local authorities both on the county and municipal level, are responsible for various other kinds of control, for example national parks.

Today there is in some countries a discussion on how to balance the need for inspection and control with consulting. Companies and other organisations for which environmental regulations importantly influence their activities may often fail to follow these regulations only because of lacking competence. The controlling authorities, hopefully with much larger knowledge and experience, have in this situation a possibility to help in many ways: monitoring schemes, proper changes in the production processes, needed investments, etc. Small companies that do not have a special person responsible for environmental matters may especially need help. A consulting function is often a very good way to improve performance and may not necessarily prevent the inspection function.

In Poland the function of inspection and control is collected in one authority. The Polish State Environmental Protection Inspectorate (see page 610) was established in the early 1980s with the main task of supervising compliance with environmental legislation. In the 1990s, the Inspectorate was given the right to interrupt environmentally harmful activities. The Inspectorate is also in charge of a comprehensive monitoring system and has been given the task of being a watchdog for 80 especially polluting industries.

Environment and the transition in Central and Eastern Europe

Environmental trends

The systems change in 1989-1991 offered the nations in Central and Eastern Europe a unique opportunity to fundamentally reconstruct their environmental policies and environmental management systems. By drawing on the many years of accumulated experience within the OECD, post-communist Europe was given an opportunity to learn from western countries' successes and mistakes. By incorporating environmental concerns in the new economic, social and environmental policies from the outset, the possibility of leap-frogging the West appeared, and employing an historic opportunity to find a new path toward sustainable development. Some studies even suggested that this constituted a possibility to move to the forefront of environmental protection.

As opposed to this scenario of hope, there were also scenarios of doom related to the fear that it would not be very popular under new free market regimes to develop restrictive resource use regulation. So how would the new regimes in the region deal with the environment compared to the old regimes?

National environmental policy documents indicating a commitment for sustainable development have been adopted by virtually all ministries of environment in the region. The concept of sustainable development has gained currency in the region, mainly thanks to the UN Conference on Environment and Development in Rio de Janeiro in 1992 which was attended by most Eastern European countries.

In order to integrate environmental protection concerns into the economic and sectoral policies, several governments in the region have established inter-ministerial committees for sustainable development. Environmental policy has become decentralized and the opportunities for public participation in the decision-making process have increased. New policy instruments such as environmental impact assessment, eco-labelling and environmental audits are more and more frequent. The countries in transition have in general committed themselves to the Polluter Pays Principle (PPP). Institutional capacity has increased, particularly on the central level. Although local and regional issues still dominates the agenda, the Rio conventions on climate change and biodiversity, together with a number of other international environmental treaties, have been signed and ratified. A major disappointment is that market-based instruments such as deposit refund schemes and marketable permits, which can help achieve desired levels of environmental quality at much lower costs than traditional regulatory approaches, have not yet been used on a large scale.

Since the demise of the socialist system, the countries in Eastern Europe have become less pollution intensive. This is mainly linked to the shift to a marked-based economy, which has entailed a number of important changes. Firstly, the introduction of 'hard' budgetary constraints has forced the companies to begin to set finance and efficiency-related goals instead of production goals. This has led to the shutdown of inefficient and wasteful industry which in turn has generated a considerable reduction in pollution. Secondly, liberalization of foreign trade has exposed the enterprises to international competition and forced them to increase the quality of their products and to improve the production processes. Industries which cannot compete do not survive in the long run. In the industries that survive, outmoded equipment is gradually replaced by modern equipment adapted to international cost patterns, technical

Figure 22.10. The environmental situation in Central and Eastern Europe at the time of the systems change was very often poor. On the Baltic Sea coasts many beaches were closed as here in Estonia, as the water was too polluted. (Photo: André Maslennikov.)

Figure 22.11. Policymaking in Estonia after independence. In September 1991 the people in the three Baltic republics eagerly joined the democratic political process. Here one out of almost 100 new parties int Estonia made itself known in the streets in Tallinn. Many of them had environmental issues high on the agenda. The sign reads "Real democrats unite!". (Photo: Lars Rydén.)

requirements and environmental regulations. Thirdly, economic and industrial restructuring has brought about a shift in emphasis from heavy industry to light industry and service-oriented businesses. The service sector's share of GDP has increased substantially over the past few years. Lastly, energy consumption has fallen due to higher energy prices, increased energy efficiency, industrial reconstruction and reduced industrial activity.

The role of the market economy

At the same time as the transition to a market economy has made the former socialist economies less polluting, there are areas where this transition has created new threats. For example, short-run structural adjustments of a transitional economy may increase the pressure on the environment in certain instances. One example is the light industries whose production may expand a great deal before the environmental authorities have an opportunity to react.

Review
Box 22.5

Blocking environmental protection in socialist countries

A number of factors made environmental protection difficult in the socialist system in Central and Eastern Europe. The socialist state, as both owner and regulator of the polluting industry, had a conflict of interest. The state had a direct financial stake in avoiding environmental law enforcement against the enterprises it owned and controlled. Among the factors that made environmental protection difficult or impossible were:

Implementation always requires a certain degree of *interpretation*, and the Soviet-style central planning hierarchies required a long series of interpretations. This was difficult for the planners. Failures were not an acceptable mode of learning and errors were perpetuated. Information was secret or scarce and inappropriately used. There was a bias towards large-scale solutions.

There was *no freedom* for independent environmental organizations and the general public could not monitor the behaviour of polluters. The leadership of the socialist countries denied itself the information concerning the extent of environmental problems that non-governmental organizations and environmental movements can provide.

The agencies in charge of environmental protection were often understaffed and *lacked sufficient institutional capacity*. Enforcement was weak or non-existing.

The enterprises faced *no threat of bankruptcy*, and closures of the worst polluters were usually not considered because of the prevailing ideology that did not permit unemployment. The use of monetary measures in environmental protection was made difficult in an economy that was not monetarised itself and where the enterprises did not have to pay attention to costs. The real value of fees and fines was negligible. The socialist enterprises operated under so-called soft-budget constraints. This implied that financial performance did not matter. Economic losses could always be covered by subsidies from the state. Hence, the companies could cover the fees and fines with state subsidies or simply ignore them.

Figure 22.12. Car traffic is increasing in the entire region. The steepest increase has occurred in Poland where it has led to crowded streets, worst in Warsaw but bad also as here in Gdynia. Car exhausts is today the worst source of air pollution. (Photo: Lars Rydén.)

In the beginning of the 1990s, some 1,500 nature reserves in Russia suffered from insufficient control services due to lack of funding. Local elites have dealt with natural resources with a free hand. The illegal export of endangered species is increasing because the environmental authorities often turn a blind eye to poaching.

The virtual disappearance of government authority in some regions in Russia (and arguably also in other countries in the Commonwealth of Independent States – CIS) and widespread corruption and lack of accountability to the national government or to the local population pose serious threats to environmental protection. Of course it is not possible to implement an elaborate system of environmental charges and penalties when many regions refuse to transfer taxes to the federal budget, as is the case in these countries.

A new problem in Eastern Europe is the environmental consequences of land privatization. Once land has been privatized it may become difficult for governments with limited financial resources to purchase areas which should be protected. Thus, it may be difficult to develop new nature preserves and national parks. It should be noted that this does not seem to apply for Russia. Most land in Russia remains in public hands and the creation of natural reserves has accelerated recently because so much land is available.

Another issue which is a matter of concern is the rapid expansion of tourism. In some areas, such as the unspoiled coastal areas of the three Baltic States, eastern Germany and Poland, there is a risk of uncontrolled development of tourism and recreation facilities. Negative tendencies are also discernible in forestry and agriculture. The transition to a market economy tends to create pressure for increased intensification of forestry and agricultural activity. Drainage of marshy areas and an increased use of fertilizers and pesticides would threaten the rich natural areas and traditional landscape which still remain.

The transition to a market economy means that the countries of Eastern Europe are gradually being transformed into consumer societies. More and more, the environmental problems of Eastern Europe will start to resemble those of developed market economies. A case in point is eastern Germany where the amount of garbage collected per inhabitant doubled two years after reunification and soon reached the same level as in the western part of Germany (OECD, 1993). The growth rates for passenger cars in Eastern Europe are among the highest in the world. In Poland, for example, the number of passenger cars per 1,000 people increased from 61 in 1980 to 167 in 1992. With the current trend private cars per 1,000 person will increase to almost 400 in the year 2010, a level comparable to western Europe (Anderson, 1994). The demand for motorized transport (including freight carried by road) is likely to increase as incomes rise and markets are liberalized. The development of the European Single Market may intensify the international road freight traffic and thereby increase pollution. Hence, there is a major risk that unsustainable structures and consumption patterns that have emerged in the West are now going to develop in Eastern Europe. Without strong environmental policies and an environmentally aware public, development in Eastern Europe might begin at the point where the West stood a few decades ago.

The opened borders between Eastern and Western Europe have increased the possibilities for "dirty" businesses. In the beginning of the 1990s, Greenpeace International revealed 64 trade schemes in which Poland was targeted to receive hazardous waste from western countries (World Watch Institute, 1992). Another problem is the illegal export of CFCs from Russia (and possibly other Eastern European countries as well) to Europe, Canada and the USA. To solve this problem the World Bank has offered Russia $30 million for phasing out all CFC production.

Institutional capacity

The revolutions in central and Eastern Europe did not replace all vestiges of communist bureaucracy with a new democratic and effective government. It

was practically and economically impossible to "clean the house" during the transitions in the region. As a result, many of the old bureaucratic structures remain, especially at the local and regional levels. These old structures pose substantial challenges to environmental protection reforms in the region.

Very clearly, the existing environmental protection administration needs to be strengthened. The EBRD (European Bank of Reconstruction and Development) has identified the following problems related to the performance of existing institutions.

- Environmental administration remains centralized. Local authorities are weak and public participation is underdeveloped.
- Overlapping responsibilities reflected in fragmentation of responsibility, rivalries between ministries and within individual agencies and levels of administration.
- Lack of integration. Public administration tends to be structured according to the traditional areas of environmental management (air, water, soil, noise etc.). This approach makes it difficult to address certain problems requiring inter-sectoral cooperation.
- Under-resourcing in key areas. Control institutions such as laboratories and inspectorates, and newly autonomous regional administrations, face serious budgetary constraints. They are frequently understaffed and suffer from shortages of high quality staff, inadequate transport and lack of equipment.
- Inadequate statistical systems. The emergence of new private firms leads to significant delays in the availability of environmental data and impacts on the ability of enforcement agencies to take action (EBRD, 1993).

The professional bias of the employees of the environmental administration is another barrier. Presently, most specialists are scientific and technical professionals, for example, biologists and engineers. There is a lack of expertise of the "soft" aspects of environmental management such as public finance, economic development, law, enforcement and policy analysis. These issues provide keys for an integrated and preventive approach to environmental protection. Improving the institutional capacity includes changing attitudes and habits inherited from the socialist period.

The Ecofund in Poland, managing money generated from debt-for environmental swaps with some of Poland's creditor countries in the OECD area, has been designed to overcome typical problems that appear during the transition period. Two important features of the Ecofund are (1) the long-term financial commitment from western countries and (2) the independence from the rest of the environmental protection administration. In this way its vulnerability to sudden political changes and economic turbulence is significantly reduced. Furthermore, the Ecofund is capable of attracting the most skilled experts and policy-makers in the field of environmental protection because of the fact that it can offer salaries that are compatible with those of the private sector.

The role of environmental NGOs and the general public

Environmental issues have lost much of the prominent position on the political agenda they enjoyed at the time of systems change. Green parties do not fare well in the general elections, the environmental organizations are still weak and public preferences for environmental protection are declining. For instance, in the former Czechoslovakia 83% of the citizens identified the environment as a priority in 1990 while two years later only 14% held this opinion (Panayotou, 1995). According to an opinion poll carried out by the Polish opinion institute CBOS, only 3% of the Polish population has heard about Agenda 21 (Mistewicz, 1997). Kozlowski (1994) speaks about a "political disaster" for the Polish environmental movement. In his view, the movement has become discredited,

Figure 22.13. Media and NGOs in Central and Eastern Europe has grown to become an important force in the green movement: The magazine Eco Chronicle, published in St Petersburg and distributed in entire Northwestern Russia, is contributing to this debate. Eco Chronicle is published in both Russian and English language.

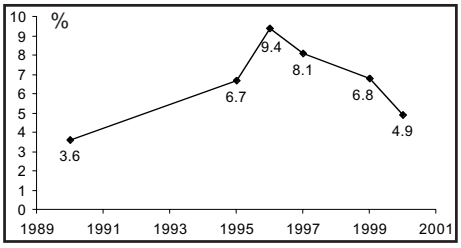

Figure 22.14. Environmental protection share of investment outlays in the national economy 1990-2000 in Poland. (Source: Rocznik Statystyczny, 2001.)

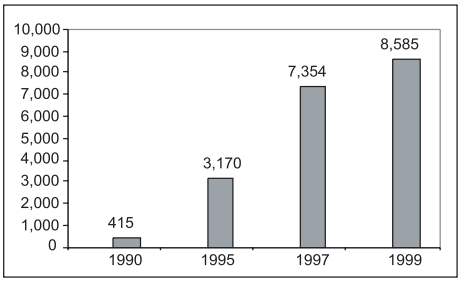

Figure 22.15. Environmental investments in Poland. Figures in millions PLN. (1 USD = 4 PLN) (Source: Kalinowska, 2001.)

even ridiculed. He argues that there is no strong ecological lobby for sustainable development in the parliament and concludes that the gains of the 1980s are, to a large extent, wasted.

A major reason why environmental issues have lost saliency in Eastern Europe during the past few years is the fact that the transition period has imposed extraordinary economic and social burdens on the population. The economic stress connected with the transition, such as unemployment and falling standards of living, caused limited support for environmental expenditures. Among some people there may be a fear that job creation will be hindered by strict environmental policies. Environmental protection is likely to remain a secondary priority for the countries in transition as long as the most fundamental needs of the people are not satisfied. Consequently, politicians will gain more legitimacy by promising and realizing better consumption for the population than by taking measures to improve the environmental performance.

Will the green issues re-appear in the political debate? Do the green parties and environmental organizations have a future? Will the consumers eventually begin to "vote green" with their wallets? Hopefully yes. But if it is so that environmental beliefs cannot be mature until material needs are satisfied then it will take a few more decades before the environmental awareness in Eastern Europe will reach the Western European level, and environmental NGOs are likely to remain marginalized until a strong middle-class appears.

Experiences from Poland

The Polish environmental policy experience is useful to study for other countries in post-communist Europe. The following lessons could be drawn from Poland.

Symbolic policy may matter in the long run. Environmental policy before the systems change was in many respects a matter of empty rhetoric. However, the fact that many instruments and regulations existed on paper *before* 1989 was helpful for policy-making *after* 1989. For instance, the introduction of economic instruments in the 1980s was not irrelevant for the widespread and successful use of economic instruments in the 1990s; but it was a natural thing to make an effective use of instruments in the 1990s. Likewise, the establishment of a powerful enforcement agency (the State Inspectorate for Environmental Protection) in the 1990s would probably not have been possible without the quasi-enforcement agency that existed in the 1980s. Hence, the value of a policy that seems to be a pure paper product should not be underestimated because it may constitute the first step towards further, more seriously aimed policy reforms.

International pressure is important, especially when the environment is low on the domestic political agenda. After 1989, the environment lost much of the prominent position on the political agendas it had enjoyed in the latter part of the 1980s. However, the now ongoing approximation of Polish environmental law to European Union legislation again strengthens the position of environmental issues.

It is important to be ready to paddle when the big waves come along. The Polish environmental policy community was extremely successful in the first years of the transition because it entered the framework of the new system with clear ideas about what had to be done. When the policy window appeared in 1989-1991 it acted quickly and effectively to realize these ideas.

Financing environmental policy

Environmental investments

Most environmental actions requires funding. Financing environmental policy has become an important component in the economy of many countries. Most CEE and OECD countries spend some 1-2% of their GDP for environmental investments yearly. Public expenditures include building and upgrading of wastewater treatment plants, energy plants, improving infrastructure, and setting off land for nature protection areas. Private investments include all kinds of technical developments as well as equipment for abatement of pollution. Where does the money come from and how are the investments justified?

Private investments to reduce pollution are often required by legal regulation of emissions. The company has to choose between paying charges and reducing emissions, which then often requires investment in abatement equipment. But increasingly environmental investments are made since they are profitable as such. Investments as part of waste minimisation (e.g. lower energy and water consumption, and thus costs) and cleaner production schemes often have a short time for return of investments, between six and 30 months. This is a so-called *win-win* situation. Both the environment and the economy win (see Chapter 24).

But companies also upgrade their environmental performance as part of implementing environmental management practices and systems, not the least to get certified (Chapter 24). Environmental certification is seen as part of improving the image of the company or to get customers who require certification.

Providers of water, energy, waste management and bus transport, often municipally owned companies, are funded by charges on the services they provide. As an example the Stockholm Water company, entirely run on charges from their almost one million customers, have a yearly budget of 3 billion SEK (USD 300,000), and is regularly investing to expand wastewater treatment and expand infrastructure. But in general water companies often do not have enough income and are partly financed through taxes. This is even more typical for municipal bus companies.

Environmental investments in the EU accession countries are relatively larger, both because of the new requirements and because of much lower GDP. In Poland the rate of investments in environmental protection increased dramatically during the 1990s. In absolute numbers it increased from 415 MPLN (million zloty; 4 zloty per USD) in 1990 to 8,585 MPLN in 1999, which corresponds to 1.9% of GDP or 8.2% of total investments from the state budget. In Lithuania, which is 10 times smaller and has a much less solid economy, the state budget expenditures for environment were about 50-100 M Litas after 1996 (1 LIT = 1 PLN) corresponding to 0.8-1.6% of state investments. So far investments have been dominated by wastewater systems. 98.6% of state budget expenditures in the environment sector in year 2000 have been earmarked for wastewater with the remaining 1.4% for solid waste. Poland which had already done much to improve its water management in the earlier part of the 1990s, then invested in air pollution abatement and waste management (see Figures 22.14 and 22.15).

Table 22.1. Environmental investments in Lithuania (millions of Lt; 1 USD = 4 Lt, 1999)
A = Environmental expenditures for investments;
B = From taxes on natural resources and charges on pollution;
C = Environmental expenditure as a percentage of total State budget expenditure

	A	B	C
1996	90.0	46.3	1.7%
1997	74.8	65.9	1.1%
1998	81.7	59.7	1.1%
1999	48.8	57.5	0.8%

Country	State Budget	Regional Budgets	Extra-Budgetary Funds	Enterprises Own Resources	International Loans and Grants
Bulgaria	20	8	5	63	4
Czech Rep.	24		13	63	
Slovak Rep.	50	16	16	16	2
Poland	5	19	41	31	4
Russian Fed.	29		5	64	2

Table 22.2. Sources of financing of environmental expenditures (%). (Source: OECD, 1995.)

Figure 22.16. The results of environmental policy. Beaches on the eastern shores of the Baltic Sea have become very different as compared to the early 1990s. Today millions of people are enjoying healthy beachlife as here at the dramatic coast outside Zelenogradsk in the Kaliningrad region. (Photo: Lars Rydén.)

When analyzing the international community's environmental assistance to Eastern Europe (CIS excluded) in the period 1990-95 it appears that the largest loans from international finance institutions were given by the World Bank and the EBRD (822 and 667 million Euro, respectively) while the most important bilateral aid programmes were launched by Germany and the USA (392 million Euro and 228 million Euro, respectively). The World Bank was instrumental in supporting the countries in transition in their efforts to set priorities, build up institutions and to formulate adequate environmental policies. It was also involved in a number of regional projects (for example, for the Aral Sea and the Baltic Sea). Support for projects of global importance (climate, ozone layer, biodiversity, etc.) is also channelled via the Global Environment Facility (GEF) - a cooperative venture of the World Bank, the UN Environmental Programme and the UN Developmental Programme (World Bank, 1992). An important difference between the World Bank and the GEF is that the former only offers loan while the latter only offers grants.

Economic instruments for environmental investments

Not all companies and municipalities are able to set aside resources for environmental investments, even if this is required by law. Financing of environmental investments from municipalities' own resources is unusual, except for revenues from user fees (charges on water, energy and waste management). Various economic instruments are thus used by the authorities to help the process. These include trading permits, subsidies including those via special environmental funds, damage compensation, and finally banking.

Trading of emission permits, described in Chapter 19, in effect transfers resources from one richer company to another less rich with much pollution, to invest in abatement equipment.

Subsidies are made possible through funds most often built from pollution fines and taxes. Poland established its *National Fund for Environmental Protection and Water Management* quite early, 1989. It is today a major instrument to finance environmental investments, through so-called soft loans (low credit rate, long mortgage times) and subsidies. Similar funds exist on the county and municipal levels. Later also Lithuania and Latvia built similar funds. Thus in Lithuania pollution charges are the primary sources of revenue for 56 municipal nature protection funds and more recently, the *Lithuania Environmental Investment Fund* (LEIF), non-compliance fees make the main source of revenue for the State Nature Protection Fund.

Damage compensation especially to allow remediation of polluted land and soil is becoming an increasingly larger cost in the West. When previous industrial sites are turned into residential areas a considerable costs is often soil remediation (Chapter 18). Costs, that is damage compensation, should be legally born by the polluter. Often this is not possible e.g. if the company does not exist any longer or if it is simply too expensive, and may lead to long court processes. In practice the builder or owner of the site, and often also the state, has to enter to share costs. Funds are thus constructed to make this possible. The largest might be the US so-called Superfund, from which billions of dollars are invested yearly in remedial actions. The Superfund, which is a revolving fund to make immediate action possible, is built by fees on producers of toxic and hazardous waste and payments for clean-up actions.

International financing. On a global scale environmental investments in developing countries, where it is often most needed, cannot be carried by the countries on a sufficient scale. Thus international financing tools have been constructed. The largest is today the Global Environmental Facility, GEF, in Washington DC. This fund is investing some 10 billion USD yearly in environmental projects. Some of the financed projects are in the eastern part of the Baltic Sea region, in particular Russia. The World Bank also provides e.g. soft loans for environmental projects. Costs might be considerable. Thus the costs to address the 132 so-called hot spots in the Baltic Sea region according to the Helcom Joint Action Programme (Chap. 23) is estimated to 18 billion Euro over 20 years (1992-2012). So far some 7 billion Euro has been invested, mostly through international banking.

Environmental assistance to Eastern Europe

The European Commission has estimated that the cost for the associated members in Central and Eastern Europe to comply with EU environmental regulations is Euro 120 billion. About 80% of this sum will have to be devoted to investments for compliance with the combustion and water and wastewater directives. The Commission's calculations show that full compliance with EU environmental laws could require 3-5% of the applicant countries' GDP over the next 20 years (ENDS Daily, 1997).

A very considerable activity has been launched from Western Europe and the USA to assist Central and Eastern Europe in their efforts to improve the environment. By and large, the programmes can be divided into three categories: (1) transfer of

advanced technology for the control and monitoring of pollution; (2) advice on the development of institutions, laws and policies; and (3) training. The European Bank for Environment and Development (EBRD) was set up in 1991 with the specific goal of assisting the transition of Eastern Europe to democracy and a market economy. The bank's not undisputed policy is that all activities shall promote an environmentally sound and sustainable development. The EBRD offers loans for environmental protection for both the private and public sector. The bank has also provided support for various regional projects and established a Nuclear Safety Account to enhance security at nuclear power stations in Eastern Europe. A cornerstone of the bank's policy is that all of its larger projects must be preceded by an environmental impact assessment.

The European Union has established two aid programmes for Eastern Europe: TACIS, for the states within the CIS, and PHARE for all other countries in the region. For TACIS, the most important concern so far has been to take measures to enhance nuclear safety in Russia and Ukraine. PHARE has been involved in numerous projects ranging from air and water pollution control to development of institutions and national environmental protection strategies. The largest recipients in per capita terms have been Estonia and the Czech Republic. International aid plays sometimes an extremely important role. For instance, the OECD estimates that some 90% of the funds for nature conservation in Bulgaria come from international donors.

A number of shortcomings of the aid flows can be identified. First of all, the money offered is still far from meeting the needs of Eastern Europe. According to PHARE, the EU's aid programme to central and Eastern Europe, some 300 billion Euro is required to tackle the region's environmental problems.

Second, the interest for environmental aid tends to decrease with the distance from the former Iron Curtain. Third, the local expertise has been under-used. Finally the international finance institutions sometimes too rigorously apply the principle that their projects be "bankable," that is, that they generate a revenue stream. Many important environmental projects are discarded for this reason.

REVIEW QUESTIONS

1. Describe the process of policy making and the four stages, independent streams, and garbage can models.
2. Which are the three classes of public policy instruments? Discuss the pros and cons of each.
3. Which are the possibilities for policy instruments to come in packages? Give examples.
4. What is meant by the concept "civil society?" Compare it to the other sectors of society, particularly with regards to policy-making.
5. Describe how science, media, and non-governmental organizations can contribute to the policy making process. How can individuals exert influence on environmental policy?
6. List public institutions and authorities active in implementing environmental policy, and describe their respective roles.
7. What is meant by "command and control"? Describe how it is possible to soften the command and control approach through negotiations or consulting.
8. Which were and are the major difficulties for countries in transition when shaping their environmental policy? In what ways do the environmental protection administrations in Central and Eastern Europe need to be strengthened?
9. About how large is the environmental sector in society as judged from the size of public investments?
10. Which are the sources for financing environmental policy in the countries in transition?

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Internet resources

Coalition Clean Baltic
http://www.ccb.se

Denmark: Ministry of Environment and Energy
http://www.mem.dk/ukindex.htm

EnviroLink Network. The Online Environmental Community
http://envirolink.netforchange.com/index.html

Environmental Organizations Webdirectory
http://www.webdirectory.com/

The Green Web Guide
http://home5.inet.tele.dk/nyboe/greendex.htm

Greenpeace International
http://www.greenpeace.org/

The International Council for Local Environmental Initiatives (ICLEI)
http://www.iclei.org

OECD (Organisation for Economic Co-operation and Development)
http://www.oecd.org

The Swedish Association of Local Authorities, index of twinning partnerships
http://www.lf.svekom.se/int/van/index.htm

Union of the Baltic Cities
http://www.ubc.fi

National ministries in charge of environmental protection:

Estonia: Ministry of Environment
http://www.envir.ee/eng/index.html

Finland: Ministry of Environment
http://www.vyh.fi/sve/mm/mm.html

Germany: Federal Environment Ministry
http://www.bmu.de/english/fset1024.htm

Latvia: Ministry of Environment
http://www.varam.gov.lv/

Lithuania: Ministry of Environment
http://www.gamta.lt/def200_e.html

Poland: Ministry of Environment
http://www.mos.gov.pl/index_main.shtml

Sweden: Ministry of Environment
http://miljo.regeringen.se/index.htm

Glossary

civil society
has its place between individuals and the state, including social movements, churches, charities, pressure groups, organised interests, political parties and study groups

command-and-control
the use by authorities of a range of direct regulations such as standards, bans, permits, zoning restrictions, etc., and control that these are met in society

The Ecofund in Poland
a fund managing money generated from debt-for environmental swaps with some of Poland's creditor countries in the OECD area, designed to overcome typical problems during the transition period

economic vote
when an individual buys e.g. the least environmentally harmful product, or, in other words, to vote with the wallet

effectiveness
the extent to which a measure, such as an investment, succeeds in relation to the set policy targets

efficiency
the extent to which the costs of a policy are justified in terms of its effects, a cost-effective policy seeks the least costly method of attaining a specific environmental quality goal

equity
the balance between costs and benefits across the parties concerned, to promote burden-sharing and fairness

European Bank of Reconstruction and Development, EBRD
a bank established in 1991 to assist the transition of Central and Eastern Europe to democracy and a market economy, some of the ERRD's activities promote sustainable development

The European Sustainable Cities and Towns Campaign
a project launched in 1994 by the DG Environment of the European Commission to promote development towards sustainability at the local level through Local Agenda 21 processes

Global Environment Facility, GEF
a co-operative venture of the World Bank, the UN Environmental Programme, UNEP, and the UN Developmental Programme, UNDP, to offer grants for environmental projects promoting sustainable development in the developing countries and CEE

ICLEI
the International Council for Local Environmental Initiatives, established in 1990 through a partnership of the United Nations Environment Programme, the International Union of Local Authorities (IULA), and the Centre for Innovative Diplomacy

implementation
realisation or accomplishment of a policy

National Chemical Inspectorate
authority, in charge of supervising the use of chemicals in society

National Franchise Board
an administrative court which grants permissions (concessions) for specified kinds of establishments considering the allowed level of environmental damage

National Fund for Environmental Protection and Water Management
fund built from pollution fines and taxes, established in Poland in 1990 and later in Latvia and Lithuania, to finance environmental investments through so-called soft loans and subsidies

OECD
the Organisation for Economic Co-operation and Development, consisting of almost all states in Western Europe, as well as Czech Republic, Hungary, and Poland together with the e.g. United States, Canada, Turkey, Australia and New Zealand

PHARE
a European Commission programme to economically assist the transition of Central Europe to a market economy

policy
the principle way of dealing with a problem, as described in declarations, programmes or reports from e.g. political parties or governments

policy instruments
tools used by the policy-makers in their attempts to alter society by implementing a policy

political vote
vote in elections at the local, regional, and national level or in referendums

politics
how to execute a policy

suasion
activities aiming at changing an agent's behaviour on a voluntary basis, through persuasion using e.g. information, training, recommendations, and negotiations

TACIS
a European Commission programme to economically assist the transition of Eastern Europe to a market economy

The Union of the Baltic Cities, UBC
association of cities, open to all the cities in the Baltic Sea region, to promote cohesion and a better standard of life for the citizens of various cities located in the Baltic Sea basin