STRATEGIC ENVIRONMENTAL ISSUES IN CENTRAL AND EASTERN EUROPE

REGIONAL REPORT

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THE REGIONAL ENVIRONMENTAL CENTER
for Central and Eastern Europe
STRATEGIC ENVIRONMENTAL ISSUES
IN CENTRAL AND EASTERN EUROPE
About the REC

The Regional Environmental Center for Central and Eastern Europe (REC) is an independent, non-advocacy, non-profit foundation. The REC was established in 1990 by Hungary, the United States, and the Commission of the European Communities. Seven countries have since joined these founding sponsors.

The REC’s mission is to promote cooperation among diverse environmental groups and interests in Central and Eastern Europe; to act as a catalyst for developing solutions to environmental problems in this region; and to promote the development of a civil society. Beneficiary countries are Albania, Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania, Slovak Republic, Slovenia, and the Former Yugoslav Republic of Macedonia. In these countries, the REC primarily supports environmental non-governmental organizations (NGOs), but also cooperates with local authorities, national governments, academic institutions, and the private sector.

In addition to its headquarters and local office in Budapest, the REC has local offices in Warsaw, Bratislava (serving both the Czech and the Slovak Republics), Bucharest, and Sofia. There are local coordinators in Croatia, Slovenia, Albania, and the Former Yugoslav Republic of Macedonia.

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PREFACE

The Regional Environmental Center presents this Strategic Environmental Issues Report, which addresses the environmental problems of the Central and East European (CEE) countries it serves (Albania, Bulgaria, Croatia, the Czech Republic, Hungary, the Former Yugoslav Republic of Macedonia, Poland, Romania, Slovakia and Slovenia). There are two important features of the Report. It has been fully prepared and developed by environmental experts and activists of the CEE countries, so the opinions and interpretations were taken directly from the original sources. It also attempts to present a regional environmental perspective of the countries in transition, taking full account of the dynamic political, economic and social changes occurring in the CEE region.

The comprehensive and representative character of the Report stems from the method of preparation. Questionnaire-based interviews were conducted by the REC staff, contractors, and volunteers, with top government, non-governmental organization (NGO), academic and business environmental experts from the region. The list of interviewed experts is presented in Appendix 1. The questionnaire used to conduct the interviews is shown in Appendix 2. The Annex summarizes strategic environmental issues as seen in the respective CEE countries. As an additional result of the interviews, a series of country reports was produced. These have been published as a second volume of this Report.

The basic assumption initiating this project was that environmental problems in the CEE countries cannot be solved in isolation from political, economic and social issues. New mechanisms and driving forces which are contributing to the ongoing transformation of the CEE countries must be considered. Therefore, the environmental perspective presented here has been described in conjunction with the challenges and achievements of the market-driven social and economic systems being established in the CEE countries.

The Lucerne Ministerial Conference on Environment held in April 1993 adopted the Environmental Action Program for Central and Eastern Europe (EAP). The intention of our Report is to map out the ideas of environmental experts from CEE countries regarding strategic environmental issues. A picture of the needs and expectations drawn from the collected opinions may serve to supplement the recommendations of the Environmental Action Program; documentation of the collective perception of their own problems may facilitate implementation of the proposed Action Program. The Program may be successful in the CEE countries only if it is perceived by CEE people as its Western authors intended it to be perceived.

This Report is the outcome of several discussions held at the REC starting with a brain-storming session on 16 August 1993. An advisory group consisting of Andrzej Kassenberg (Poland), Jan Kara (Czech Republic), Evgueni Popov (Bulgaria), Nenad Starc (Croatia), Gabor Szabo (Hungary) and Angheluta Vadineanu (Romania) helped in designing an approach and work plan, as well as in arranging interviews. The same group, plus Milan Caha (Czech Republic) and Sandor Kerekes (Hungary), but without Jan Kara (provided comments in writing), Nenad Starc and Gabor Szabo, discussed a draft report on January 10-11, 1994. They provided comments which helped to improve both the substance and appearance of the Report presented here.

This Report is the product of a collective effort of the REC Initiatives Team supported by advisors, volunteers and contractors. Those who worked on collecting interviews, drafting country reports and preparing the Annex and Appendices are: Andras Bezegh, Jason Brandwene, Sergiu Cristofor, Patrick Francis, Marijana Ivanova, Renata Kiss, Jürg Klarer, George Romanca, Voline van Teeseling, Nianta Thomas, Magdolna Toth Nagy, Veselava Tsakova and Janos Zlinszky.

Significant additional contributions from outside the REC were provided by Jürg Klarer (Annex, two country reports and crucial contributions to all stages of the project including coordination), Patrick Francis (Report and Annex edition and revision, and four country reports), and Voline van Teeseling (two country reports and participation in several internal discussions). Marguerite Downey language proofed the completed Report. Desktop publishing and publication layout was performed by Jürg Klarer.

We would like to thank them all for their valuable contribution.

Stanislaw Sitnicki, Executive Director
EXECUTIVE SUMMARY

Background

Strategic environmental issues in the CEE countries are the result of both the past, centrally planned economic system and the new political, social, and economic realities these countries are facing. The environmental heritage has left a long list of environmental hot spots, but also vast areas of pristine natural environment. New development policies based on private ownership and the use of market forces are attempting to achieve economic and social goals, and are creating incentives for more efficient use of the environment, as well as for avoiding environmentally related expenses. Huge economic problems (i.e. unemployment, decreases in real wages, reductions in investments) are characteristic of all the CEE countries in transition, and are receiving priority attention, often to the detriment of the environment. With old environmental problems persisting and new challenges appearing, environmental issues are becoming critical for the CEE countries due to the threats they pose to human health, the countries’ natural capital, and sound future economic development.

Challenges

Although they are facing the same historical heritage, the CEE countries are not cooperating with each other to address common problems. Attempts to cooperate are further complicated because the CEE countries are in various phases of the transition process. In addition, they are progressing at different rates and along different pathways, which results from their distinctive social and political situations. The CEE region is not unified with respect to the various strategies and actions employed to develop market-driven economies and democratic societies. This differentiation also applies to environmental protection programs. The diversity among the respective countries can offer unique experiences which could be shared among the countries. A coordinated approach to solving environmental problems in the CEE countries may stimulate their economic and political cooperation, as well as reduce the risk of conflicts.

There are three basic requirements for realizing environmental improvements in the CEE region:

- adoption of a sustainable development principle while creating the new political, social, and economic systems;
- effective cooperation in addressing and approaching similar environmental problems; and
- maintenance of foreign interest and assistance in critical environmental programs.

These requirements are interrelated. A vision for the future and strong political leadership are needed to focus people's attention on current opportunities, rather than problems and barriers, so that such opportunities may be transformed into future successes.

An integrated environmental policy is one of the greatest needs and challenges for countries of the region. Such a policy should be economically effective, socially acceptable, and technically enforceable on the national or regional level. The skills necessary for producing and implementing an integrated environmental policy are almost non-existent in the CEE countries. This capacity must be created through pilot programs, education, and training. The need for a progressive environmental policy must also be understood and supported by "non-environmental" ministries in the government. The attempt to catch-up with Western economies will not be successful without properly addressing strategic environmental issues. This reality requires that a demand for environmental protection be stimulated within all social sectors, with citizen pressure groups and the business community playing special roles.

Problems/Solutions

Experts in the CEE countries generally list the same priority environmental needs when assessing the state of the physical environment. Air quality and water resources (surface, marine, underground) are usually ranked as the highest priority issues. Municipal and hazardous waste problems, as well as deforestation, are also reported as important. An inventory of environmental problems is often presented as environmental policy. Decision-makers should realize the clear distinction between the two concepts; an inventory of environmental problems is very different from an environmental policy which would help to solve those problems. Solutions to environmental problems are usually complex and require legal and economic considerations. Strategies involving environmental investment and maintenance expenditures must balance wish with reality. A skilled and well-organized environmental administration may realize significant achievements through the enforcement of environmental regulations. Learning from the experiences of neighboring countries could help to avoid mistakes. Joint environmental programs may even result in promising business opportunities.
Critical steps to be taken in order to initiate the process of establishing a coherent and integrated approach to environmental problems include the following:

- The methodological and managerial capacity of environmental decision-makers must be improved through extensive training and advising. A comprehensive step-by-step procedure for approaching environmental problems needs to be formulated and put forward.

- The organizational and legal basis for environmentally related activities must be created. The ability of the public and government administrations to act is not only dependent on their own capacities, but also on the existing legal and organizational framework, as well as the demand for such actions created by environmental pressure groups and the media.

- Long-term, national environmental policies must be established. They should integrate economic and environmental activities and call for sufficient enforcement of proposed steps and measures.

- All relevant social sectors, including governments, citizen organizations, scientific experts, businesses and the media should cooperate and actively participate in the development and implementation of environmental programs.

The formation of environmental interest groups is a new phenomenon in the CEE countries. Their role is to actively advocate the selection of a sustainable development strategy for their respective countries. Cooperation rather than clashes among environmental interest groups would have a significant, positive impact on programs formulated at the national and regional levels. Environmental lobbies may reintroduce environmental problems into political debates and continue to push for the integration of economic and environmental issues. Perhaps the greatest role, however, for environmental interest groups is to promote public participation in addressing and solving environmental problems. Such participation will both foster democratic procedures in decision-making and help to make market forces work for the sake of environmentally sound development.
EXPERIENCES AND LESSONS FROM THE TRANSITION PERIOD

I. Political, economic and social impacts on environmental protection at the spring of 1994

Background

1. The Central and East European (CEE) countries are called "the countries in transition" because of their challenging and pressing task to reorganize their political, social, and economic systems. These countries must transform centrally planned and managed societies into democratic, market-oriented ones. The term "social market economy" has been used to describe the ultimate goal of the transition process, the details of which, however, have not yet been fully elaborated. The notion of a social market economy serves as the basic concept from which an implementation strategy for truly sustainable development can evolve. The maintenance of a healthy environment is inherent in such a development strategy and must figure prominently on the relevant agendas of the transition period.

2. The CEE countries do not have a common blueprint for the transition process. They are not developing in exactly the same ways or at the same pace. Instead, some countries have progressed more than others. Building a democratic society after several decades of a totalitarian system is a task which these countries are compelled to face on their own. While each of these countries faces similar challenges, there is little evidence of cooperation and mutual support given by the more advanced CEE countries to their struggling neighbors. This does not help the overall transformation and could lead to further fragmentation of the CEE region.

3. A similar lack of cooperation among the governmental bodies within each CEE country during the transition period has led to difficulties in developing a cohesive transition in policy, economy, and social life. Thus far, the incoherent transition process has revealed that the necessary political changes initiate economic reforms, which tend to cause social problems. Political initiatives followed by economic actions lead to social stresses. The core areas of change (policy, economy, and society) have not been integrated during the transition period so as to strengthen, rather than inhibit, the process and success of reform. The rapid rate of transformation has overwhelmed the capacities of these countries to handle the problems that arise from the process. One lesson learned from the transition period is that it is crucial to carefully measure and plan for the impacts of social and economic programs on the whole system.

Political changes

4. The environment was a high civil priority in the CEE countries on the eve of the political breakthrough. There had been long-lasting concern over the health effects caused by environmental pollution, especially in industrial areas. The environment was used by the public as a political weapon aimed at showing the mistakes of the previous political and economic systems. Indeed, pressure from environmentalists contributed substantially to dismantling the previous political systems.

5. A plural and open society emerged after the establishment of democratic governments in the CEE countries. Freer access to environmental information allowed for improved assessment of damages and provided support for the creation of Green Parties and other pro-ecological organizations. However, environmental problems, perceived as isolated, have since lost importance in comparison with more acute economic difficulties. This drop in concern for environmental issues was unintentionally helped by pro-environment politicians who, in the course of their campaigns, presented environmental programs in isolation from the serious economic and social problems which confronted most citizens. Decreases in real wages, high inflation rates, unemployment, and other social and economic problems have pushed environmental issues down on nearly all agendas. One result has been that green parties were voted out of the Parliaments because their highly political programs simply failed to recognize other significant needs or to integrate social, environmental, and economic goals.

6. Clear evidence that solutions to environmental problems depend heavily on acceptable progress in economic development has resulted in less attention being given to political arguments for environmental protection. An active "ready to pay" attitude in the citizenry must be stimulated in order to successfully implement environmental programs. Instead, environmental groups and politicians have usually exhibited a "wait and request" attitude. Environmental problems have become obscured by social and economic difficulties. Environmental protection has turned out to be a complex and demanding task in this region. Thus, environmental issues have ceased to be perceived as a vehicle for a quick political career.

7. One lesson learned from the above-described experience is that a new perspective for dealing with environmental concerns will have to be established. Environmental thinking and activities should focus on practical achievements. Political debates on environmental needs should be more professional and solution-oriented. These debates should also be supported by economic arguments which show the impacts of proposed actions on social welfare and economic development.
Economic changes

8. Democratization of the political systems in CEE has instigated a liberal path in economic policy. The CEE countries are attempting to restore market mechanisms based on private ownership and profit maximization. A successful transition to a well-established 'social market economy' (no-nonsense capitalism) is requiring a radical restructuring of the existing industrial systems as well as improvements in technology and managerial practices. An influx of foreign capital, technology, and experiences will be crucial in order to accelerate the transition process.

9. The cost of introducing a liberal market-oriented economy, after years of bureaucratic market control, has to be paid by all social sectors, and primarily companies and individuals. Implementing economic changes also has environmental consequences. The decrease in physical output of heavy industry, due to competition and market constraints, has caused an overall reduction in pollution discharges by about 20-30 percent. Restructuring of industrial sectors has also resulted in pollution reduction due to the retrofitting of existing plants and replacement of obsolete production technologies. Furthermore, increased market prices for energy and raw materials, as well as the implementation of policies gradually withdrawing government subsidies from industrial production, have created incentives for more efficient production practices and resulted in reduced waste discharges.

10. The CEE countries are also relying upon the privatization of state owned enterprises for increased efficiency and productivity. Many countries have recognized that the privatization of production facilities should go hand in hand with solving past and future environmental problems. The rule of law should be re-established for dealing with past pollution and regulating future discharges of contaminants to the environment. Pollution problems must not be ignored, but rather addressed in line with the "polluter pays" principle. For this principle to be effectively implemented a well-established enforcement scheme is required. The realization that privatization is a complex and inter-governmental issue should be seen as a positive signal with respect to environmental protection as it provides the opportunity to include environmental considerations in the process.

11. As free markets develop in the region its citizens are fulfilling dramatically expanded roles as consumers. Economies are increasingly driven by market incentives, where the demand for products and services guides production strategy. Thus, consumer choice now significantly influences the state of the environment, contributing to environmental improvements and environmental degradation. The net impact of economic reforms on the environment will greatly depend on conscious consumer preferences. This should be recognized as a new and important phenomenon in the region, the implications of which need to be properly addressed.

12. The positive environmental consequences of economic changes occurring in the region have been offset by a variety of adverse impacts resulting from these same changes. Market reforms have set free a strong entrepreneurial spirit in the region and a great many small, aggressive businesses have rapidly appeared. To this point such development has often proceeded in a largely unregulated fashion. Landscapes have been marred and natural resources abused in the process. In such circumstances appropriate physical (land-use) planning laws should be formulated and enforced, however, such regulations have apparently been forgotten by many governments. With most commercial ventures, both large and small, now being forced to achieve economic viability, maximization of revenues has become the dominant motivating factor. The "profit now" attitude has become pervasive among much of the business community and poses very real challenges for environmental protection in the CEE countries. As prices for raw materials and energy rise, competition intensifies, and state subsidies disappear, incentives to produce as cheaply as possible grow and environmental protection discharges.

13. Measures aimed at creating a competitive economic system in the CEE countries have resulted in some negative social consequences as well. The most visible and acute are the relatively high unemployment rates and the decreases in real income. Cuts in environmental programs have been suggested in some cases to balance economic and social requirements for financing. Mutually beneficial, positive relationships between social and environmental programs have not been examined and assessed in the CEE countries. The possibility of such relationships warrants concerted attention as many types of environmental protection efforts are labor intensive, and such efforts could provide "win-win" solutions to both environmental and employment dilemmas.

Social changes

14. The new democratic and open societies are allowing and contributing to the creation of different consumption patterns. Consumers now have the possibility to purchase goods and services which they previously did not have access to. Wide-spread and aggressive advertising of new goods and services (a recent phenomenon in the CEE countries) is engendering western values and consumption habits. This is leading to visible, negative social changes and environmental impacts. For example, the rapid growth in private passenger car use has resulted in the existing transportation infrastructure being overwhelmed. This is requiring the construction of expensive new roads and highways, and thus western transportation practices, widely recognized as unsustainable, are being mimicked. Public transport is being replaced by private transport, and
commercial transport is shifting to the highways as goods are increasingly shipped by truck instead of train. To complicate matters, the services of the more economically efficient and environmentally friendly mass transit systems currently existing in the region are becoming evermore expensive and less convenient as State subsidies are cut and funds diverted towards the development of automobile infrastructures.

15. The results of another change in consumer behavior can be seen along streets and in wild garbage dumps throughout the region: plastic bags and bottles, one use razors, cardboard/foil drink containers, and innumerable other forms of short-life disposable packaging. New access to, and booming popularity of western products featuring throwaway packaging have created an almost entirely new, and rapidly growing waste stream. Domestic producers, trying to keep up with foreign competition and to supply new local demand, have also begun to utilize these materials. This waste stream, laden with plastics and much less bio-degradable than traditional household waste of the region, is putting a major burden on the already underdeveloped and overburdened waste management systems of the countries. In many other ways as well, CEE citizens are adopting consumption patterns along the lines of yesterday's western standards, and they are already encountering the environmental problems created by such models.

16. While the former political systems of the region did not succeed in creating egalitarian societies, the social stratifications which did exist were probably not as extreme or conspicuous as those being created today in the CEE by the establishment of capitalism. Additionally, today's social strata are being defined according to source and level of personal income. Under capitalism, a very visible wealthy upper class, and an equally visible poor lower class is developing. In the CEE, the magnitude and overtness of such extremes in wealth, coupled with previously unexperienced employment and economic insecurity, are inspiring sentiment to reintroduce extensive social welfare guarantees like those associated with the previous political system. The implementation of such guarantees, while defensible, can adversely effect environmental programs as they require a diversion of funds from State budgets which are already under strain in the region.

17. The average CEE citizen is also facing serious economic difficulties. Heretofore unknown (officially) unemployment and job insecurity, falling real wages, and high inflation have pushed issues of economic welfare to the top of nearly all agendas. People are pre-occupied with their day-to-day needs and are not prepared to make judgements based on their long term needs, including that of a sound environment. Citizens are more concerned with price increases and reductions in working places than environmental protection needs. Environmental preservation is simply not a high priority for many people, even though political changes have set the stage for citizens to be more involved in determining the future of their societies. The decrease in public interest with respect to environmental protection activities is limiting the impact of public participation, which should otherwise promote proactive pro-environmental behavior. The potential and importance of public participation itself are still not fully appreciated or utilized in the region and training possibilities in this area go untapped. As with many other issues, strong leadership is crucial at this time, especially within citizen organizations, if the full benefits of participatory democracy are to be realized and environmental goals given their due commitment.

II. Assessment of environmental assets and damages

Environmental assets

18. The heritage of the past system looks more favorable if measured by the environmental assets which are still intact in the CEE countries. Environmental assets are those natural resources which are, or can be, used for economic activities. Mineral resources, forests, arable land, etc., constitute a significant value. The environment provides assets which are part of the national wealth. Apart from mineral deposits, energy sources, fertile top soil, clean water, and forest resources, there are additional assets such as scenic landscape, hospitable climate, genetic diversity, and others which can contribute to economic prosperity.

19. Certain features of the previous political and economic system, such as strict centralized authority and forced movements of some local populations, have left large areas of the CEE region untouched by industrial activity and sparsely inhabited. Traditional, low input and labor intensive agriculture (private or collective) allowed for the largely undisturbed development of natural ecosystems. Pristine nature is still estimated to cover about 30 percent of the area in the CEE countries. This region contains the greatest biodiversity in Europe.

20. Preservation of European biodiversity located in the CEE region is a task of international importance. It can't be accomplished solely by the efforts of countries in the CEE region. A subsidiary principle should apply to the preservation of environmental heritage because of its common importance. Those who benefit from the preservation of biological richness in the CEE countries should contribute to the opportunity costs which are incurred due to restrictions imposed on economic activities in the region. Nature restoration and conservation is a labor intensive activity. Therefore, it can be an important source of employment, new opportunities for which are urgently being sought throughout the CEE countries. In addition, steps toward the responsible use of the environment (a precautionary principle) by industry can prevent the creation of environmental refugees. This issue is extremely important in the CEE region as several hot spots exist posing severe environmental threats to local residents (i.e. mining areas, chemical and metalworking facilities, and power plants including obsolete nuclear installations).
Environmental damages

21. Apart from environmental assets that include pristine areas, the past economic system left environmental damages which create the region's liabilities to nature. The evidence of environmental degradation harmful to human health was used as a political argument against the previous political system. The previous system's emphasis on heavy industry and lack of advanced technologies, along with the substantial absence of a conservation ethic in society and government restrictions on pro-environment movements which did exist, resulted in some areas experiencing severe air, water and soil pollution of varied and numerous types. The assessments of material losses caused by excessive pollution discharges were the first evidence of costs incurred from this degradation. While the legacy of these old problems remains to a large extent, new damages resulting from changes associated with the transition period, such as those related to growing amounts of communal waste, the rapid increase in automobile use, and largely unregulated new commercial development, pose emerging challenges to be overcome.

22. More attention is being given to environmental hot spots than to environmental assets. As a result, the picture of environmental catastrophe in the CEE countries is widespread. Environmental hot spots also gained more attention and financial assistance because of being located in highly populated industrial areas. However, this approach should not compromise the importance of preserving pristine natural areas. Protection of pristine nature should especially be considered a high priority at this time because of the trend to locate new industries in these areas.

23. The demand for natural resources decides, to a certain extent, how much the environment will be changed. The use of modern technology reduces the impact of industrial activities on the environment. This is a promising "at source" type of tool for environmental protection. Management measures that mobilize and discipline the use of natural resources and promote waste minimization and recycling practices are additional technology-based solutions. This way of acting and thinking is still not a habit in the CEE countries. "Responsible care" programs declared by some western companies, as well as other self-regulating environmental protection programs (voluntary environmental code of conduct), are not employed by the same companies while operating in the CEE countries. Damages are going to accumulate. For example, these countries are still far from achieving the goal of a net reduction in wastes disposed to the environment.

24. The amount and impact of wastes released into the environment depends on the scale and method of production and on its environmental intensity. The lesson learned from the transition period is that the intensity factor should be examined first, before considering the scale of production. This approach can help to combine environmental and economic concerns. This can also be the starting point from where the CEE countries can begin to undertake future development as a sustainable process.
III. Foreseeable development patterns

The need for a strategy

25. The countries of the CEE region have not dramatically improved their economic situation over the past decades. Their development has been characterized by slowly increasing incomes per capita and for the foreseeable future they will still belong to the medium level income per capita group of countries. As financial resources expand, the use of modern technology in production activities will become more common and will result in less destruction to the environment. On the other hand, however, a more sophisticated production capacity allows for greater, albeit more efficient, exploitation of even more environmental resources. The predominant trend in the past has been to exploit the environment for development purposes. Thus, development has so far been progressing at the expense of the environment.

26. The trade-off between per capita income and the quality of the environment can be observed in the history of industrialized Western economies. The transition from low to high income per capita was made at the expense of the environment. Huge environmental investments were made afterwards to reverse the process of environmental deterioration. A drastic reduction in pollution discharge was accomplished due to a strict command and control policy and the implementation of the polluter pays principle. However, some damages to forests, soils, animal and plant species, landscape, etc., remain irreversible.

27. The CEE countries must determine their future development strategy. Although limited, there are certain options which may be considered, tested and evaluated while the development path is being set. The CEE countries may:

- replicate the history of Western economic development, which resulted in environmental degradation, while increasing per capita incomes;
- accept the economic priority during the transition period and delay attempts to clean up the environment; or
- immediately adopt a sustainable development strategy.

Each of the above options has its consequences on the economy, the environment and the citizens of the CEE countries.

Copying the historical path of Western industrialization

28. Western industrialization was for many years carried out with little regard to environmental consequences. The quality of the environment was not seen as an economic issue. On the contrary, massive, standardized, cheap production processes were developed, raising per capita incomes to a high level relative to other countries. Environmental degradation threatening the living conditions of the population eventually prompted extensive environmental investments in the seventies and eighties. Many unsound environmental patterns of production were finally reversed.

29. Cheap and competitive industrial production is an expected outcome of liberal, market-oriented reforms in the CEE countries. Some governments are ready to ignore environmental protection considerations in order to realize economic recovery and greater employment opportunities through market reforms. An outdated strategy centered around imitating the Western industrialized model is likely to lead to a build-up of unsolved environment-related problems and to irreversible environmental damages.

30. Liberal economic policies may duplicate the errors that Western economies made in the fifties and sixties, which had catastrophic environmental consequences. There is also the potential danger that CEE countries may be forced, out of economic necessity, to specialize in "dirty" industries, which show profits only when environmental expenses are not calculated.

Delaying environmental investments

31. This strategy assumes a strong preference towards economic and ownership transformation in a country. In this approach the needs of environmental investments are recognized but delayed until funds are generated from economic performance. Market-based incentives stimulate profit-making investments. An influx of new capital is perceived as a prerequisite of economic recovery. Once economic recovery is achieved, environmental reconstruction may begin. Successful economic performance is considered a premise for environmental improvements. Under this strategy, however, it can take decades before a government is prepared to make adequate environmental investments.
32. A delay in environmental investments allows for initial subsidizing of economic development. This implies that, after a certain period of time, larger investments in environmental protection become possible. In the meantime, however, environmental quality is unchanged, or worsened. Environmental improvements will begin when society reaches a sufficiently high level per capita income or when a "green image" of the country's production becomes important for competitive reasons on the international market.

**Adopting sustainable development**

33. A sustainable development model offers a different approach, in which economic development must be combined with environmental protection. This means that progress in environmental protection is achieved along with improvements in economic performance. Resources for realizing both goals may be generated from savings in investment funds that become available due to more efficient use of energy and materials as well as the less intensive use of waste treatment and waste disposal services.

34. The CEE countries need not copy the mistakes which have already been recognized in the West. They can instead learn from these mistakes, as well as western successes, and develop policies and programs which benefit from these experiences, make use of comparative advantages existing in the CEE countries and are appropriate for contemporary social, economic and political conditions. They should introduce and enforce environmental regulations to be observed by producers. The environmental investments required from producers will force them to acquire modern, environmentally friendly technologies, which will also help to avoid possible trade barriers in the future.

35. Implementation of sustainable development models in the CEE countries is also mandated by the crucial need to protect the vast environmental assets existing in the region and supported by the trend observed in Western economies to improve conservation of their own natural resources. Future market prices of natural resources will multiply. Environmental investments today will create the foundation for the economic development of tomorrow. The rich environment of CEE countries is and will increasingly be an important factor for future economic progress.

**The costs of development options**

36. Regardless of the choice of development strategy, the costs of its implementation must be paid by the current and future societies of the CEE countries. The various options have different financial and environmental implications. These implications must be considered in the selection of a particular option.

37. The historical model of Western industrialization would only result in "end-of-pipe" solutions. A rapid build-up of industrial capacity in environmentally intensive enterprises would likely cause widespread environmental devastation. Sooner or later the environment will require a clean-up. This will imply huge costs. The historical model of Western industrialization could be attractive in the short run as there are no initial costs required for environmentally friendly technologies. The damages caused by pollution and the costs of clean-up will be paid in the form of huge environmental investments in the future. This was demonstrated in the history of Western economies.

38. The idea of separating economic and environmental goals during the transition period and suspending environmental improvements until the necessary funds are generated by the expanding economy also has a short-term perspective and displays a lack of regard for the future and its inhabitants. The argument is that a delay of environmental improvements would help to allocate more resources for economic purposes, and that this may generate funding for restoration of the environment in the future. In such an approach there are distinct phases during which economic and environmental goals are to be addressed. The priority is to achieve economic successes, while environmental requirements are to be addressed later. In this case environmental improvements are highly dependent on the performance of the economy, which will start to pay its "environmental debt" after reaching an internal investment surplus. This strategy does not reject environmental goals, but delays support for them. The consequence is a build-up and magnification of environmental damages and costs.

39. For a sustainable development model to be adopted its advantages, and the costs of less desirable alternatives, need to be clearly illustrated, and incentives for desired behavior well designed and effective. Such a development model needs to balance economic and environmental goals and to weigh them against available financial resources, technical solutions, and managerial skills. This approach can in fact be less expensive in the long-term because introducing more "at source" solutions and channelling small initiatives towards environmental improvements in the economy can result in major savings. The integration of environmental requirements and economic policy requires a new type of thinking, which is not directly supported by Western experiences. The cost of the sustainable development option is high when considering outlays in the near-term. However, these investments should pay for themselves in the longer run when economic benefits can be achieved as an outcome of environmental improvements (energy efficiency, recycling, ecotourism, organic farming, etc.). More funds must be made available for education and training, as well as for employing experts, in order to begin practical implementation of, and to achieve benefits from the sustainable development concept.
IV. Environmental cooperation among CEE countries

40. Although the development paths followed by the CEE countries have been more or less similar so far, regional cooperation has never been fully exercised in the field of the environment and remains extremely limited. New development strategies should be built using existing, yet unutilized potential for regional cooperation.

41. The CEE countries have a common environmental heritage due to the logic of the shared former system. This heritage contains both positive and negative elements, each of which need to be addressed by any new development strategies. In this way, their future development paths will also share much in common and may even be interrelated. It depends on the quality of their future cooperation as to whether they will make parallel efforts or will join forces and benefit from the sharing of experiences. It remains to be seen whether these countries will reinforce, or mutually inhibit, each other's progress.

42. As the environmental problems of the CEE countries are similar, there is also a need for coordination of their environmental policies in order to tackle priority problems in a coherent and comprehensive way. The western solutions offered to the CEE countries are not always adaptable or the most appropriate. In some cases CEE countries can provide more effective support to each other through transferring positive experiences or solutions which have been developed and tested in the region. CEE cooperation is absolutely essential to solve certain environmental problems which effect multiple countries in the region. Major international waterways such as the Danube, Vistula and Elbe Rivers and the Black and Baltic Seas are impacted by many of the region's countries and their improvement and protection will require cooperative efforts. Transboundary air pollution is another issue of major concern to some of the countries and also requires multilateral solutions. Some of the experts also noted that the CEE countries contain areas of the richest biodiversity in Europe and that joint programs among neighboring States are required to ensure their safeguarding.

43. There are several factors, however, hindering environmental cooperation among the CEE countries. A lack of political will for regional cooperation is evident. Some of the motivations behind this stem from rivalry and competition to be the first country in the region to be integrated into the European Union. These countries must realize that the West is not supporting this competition and is reluctant to import these conflicts. The chances for integration would increase if the CEE countries could demonstrate their capability of handling their own problems. So far, cooperation in the CEE region has been limited by, among other things, the countries' disinterest in dealing with other countries who cannot financially assist them. Financial assistance is still a criterion for looking for a partner. Competition for Western environmental financial assistance also reduces the incentive for cooperation within the CEE region. The basis of environmental cooperation needs to be redefined and the benefits of non-financial cooperation should be recognized (e.g., transfer of knowledge, joint activities, trade potential).

44. There is no strong tradition upon which to build regional environmental cooperation. On the contrary, many historical problems still impede cooperation and thus, the simple transfer of experience and the development of economic ties has been very limited. Indeed, better economic cooperation within the region would go a long way towards solving national and regional environmental problems. Environmental protection activities can provide a starting point for this cooperation, aiming towards a common goal. Greater cooperation could also tremendously improve the position of CEE countries during international environmental debates.

V. Foreign assistance: future prospects

45. The financial resources available for funding environmental improvements are not only limited, but also show a diminishing trend. After a short period when foreign assistance was relatively easily available, the interest of the West seems to be waning. There is an increasing need for maintaining the interest of the West in providing assistance to the CEE region.

46. There is a strong preference among donors to develop bilateral relations with the governments of the CEE countries. This can be an obstacle to undertaking regional environmental programs and to encouraging regional environmental cooperation. A common position for the CEE countries, while requesting assistance or discussing its implementation conditions, is lacking, thus making bilateral agreements even more dominant. Western interest is also shifting from the CEE region towards other regions, for example, the Newly Independent States (NIS). Considered a more important, more strategic future political partner with more potential, the NIS may receive assistance at the expense of the CEE region. The CEE countries should work together to present more convincing options to keep the interest of Western donors.
47. The share of funding devoted to support environmental and economic priorities is also being changed in the overall assistance package. Environmental assistance is decreasing relative to support for economic and social programs. It is of the utmost importance to present a comprehensive approach when requesting foreign assistance, incorporating environmental priorities in an overall economic and social development strategy.

48. Withdrawal of western financial assistance from the CEE countries would reduce incentives and an important portion of financial means which support environmental improvements in the region. The process of modernizing environmental laws, protection mechanisms, and policies would also be adversely effected. For many countries of the region western assistance is the only available channel for acquiring new skills and technology. Maintenance of future foreign assistance for environmental improvements is also important to encourage and assist cooperation within the CEE countries and to aid serious consideration of sustainable development strategies. The challenge is to maximize the benefits of the provided environmental assistance to both donor and recipient countries and the whole CEE region.
VI. Priority environmental problems

An integrated approach

49. Concentrating on the physical environment while searching for priority problems is characteristic of current attempts to develop environmental policy in the CEE countries. Decisions regarding priority actions are mainly reduced to choosing from an inventory of the most acute environmental problems. Actions are targeted toward achieving measurable environmental improvements through regulations and/or investments. Integrating environmental problems in order to identify their interrelation and the various options for coping with them is often a missing element in environmental programs. The impact of a proposed solution on other environmental and economic issues is not usually fully assessed. The environmental decision-making process needs to be strengthened before priorities are set for the physical environment and programs implemented. A procedural rather than target-oriented approach is an important, but missing prerequisite in identifying priorities and realizing successful environmental programs.

50. Exclusively focusing on the physical environment while identifying priority environmental issues leads to unbalanced and unrealistic environmental programs. A clean-up proposal can look good on paper but be technically not feasible or financially unrealistic. A proposed activity may also be unrealistic because of a lack of experience and skills, or improper planning and management. A very ambitious environmental program often represents wishful thinking and a negligence of the problems impeding the efficiency of the program.

51. Technical and financial issues aside, priority problems related to the physical environment tend to be similar in the CEE countries. They are usually determined according to the most polluted environmental media. The environmental problems which appear at the top of priority lists of CEE environmental experts are reported below.

Air quality

52. Due to the prevalence of heavy industry, the intensive use of low quality fossil fuels, and the substantial lack of modern production and environmental technologies in the CEE countries, air quality problems are reported as the top environmental priority by the majority of experts. Recent rapid growth in the number of passenger cars in the CEE countries is further increasing the load of pollutants in the air, especially in cities. Several areas have been so heavily impacted by air pollution that they are considered environmental hot spots where human health and the environment are at severe risk. It should be noted that while air quality was most often cited as a priority issue, there was some regional variation and water resources were emphasized especially in southern CEE countries.

53. Air pollution has direct impacts on human health and the state of the living environment. While air dilutes discharged substances, it also transports them over long distances, contributing to the problems of acid rain and transboundary pollution. Well-targeted and cost effective action against air pollution needs a sound methodology and careful planning. Regional air quality management systems are an example of a promising approach to this issue, however, they are almost non-existent in the CEE region.

Water resources

54. Water resources received the next most mention as a top priority environmental issue in CEE countries. In some of the Balkan countries surveyed they were given priority even over air issues. The integrity of ground, surface and marine waters are compromised by pollutants coming from industrial, communal and agricultural sources. Some major waterways in the region are considered dead and a significant portion of surface waters is not fit even for industrial use. Waste water treatment facilities (poorly functioning, having inadequate capacity or simply non-existent) were frequently described as critically needed. The multiple functions of surface waterways (e.g., Danube, Elba, Vistula) also create conflicts among their users. This applies as well to the marine environment and coastal zones. In addition, there is a rapid deterioration of underground water reservoirs. Threats from pollution, increasing demands for supply, and drought are all placing regional groundwater reserves in jeopardy. Protection of underground water is placed very high on the list of priorities for action.

55. The shortage of clean water has evolved into a shortage of any water in the CEE countries. The availability of clean water for economic (agricultural, fishing and industrial) purposes has become a topic of intergovernmental and international disputes. The growing demand for water can only be resolved through more efficient consumption and improved quality of existing sources supported by international agreements and better cooperation among the CEE countries.
Municipal waste

56. Problems related to municipal waste management are growing rapidly and have become major issues in the CEE countries. While satisfactory, modern solutions to municipal waste problems have begun to be developed in some CEE countries, others have not made much progress in addressing these issues. Very few proper disposal facilities exist in the region, and the need for such facilities intensifies as throwaway packaging, high in non-degradable plastic content, makes up a larger portion of the waste stream. The municipal waste problem is highly ranked as a direct threat to the physical environment in densely populated areas. Cross media pollution created by municipal waste dump sites is also an issue.

57. The typical solution to the municipal waste problem is to open new dumping sites. However, there is growing resistance from surrounding communities against creating dumping sites nearby. Incineration and composting technologies are alternative solutions. Opponents of municipal waste incinerators argue that they will not mitigate cross media pollution and require excessively large capital outlays. In addition, incineration of municipal waste reduces incentives for employing alternative, sustainable solutions such as waste reduction, requirements for long-life reusable packaging, and recycling.

Hazardous waste

58. Freer access to environmental information has made hazardous waste a high-profile issue. Apart from the huge deposits of each country's own hazardous waste, this problem is exacerbated by the illegal importation of hazardous waste from abroad. The hazardous waste problem is widely recognized by the public, especially with respect to nuclear waste.

59. Standard techniques for handling hazardous waste (e.g., incineration and storage tanks) are poorly developed in the CEE countries. As with municipal waste, very few modern management facilities exist. Attempts to develop programs for dealing with hazardous waste are, however, underway in the majority of countries. Inventories of hazardous waste are usually the first step in that direction. This has been accomplished in some countries and data has been published. The proper handling of toxic waste will require additional time, effort and money. The hazardous waste problem has a big impact on regional environmental cooperation because of conflicts over transboundary shipping of hazardous materials.

Deforestation

60. CEE environmental experts have highly ranked the problem of deforestation. This affects entire ecosystems and pristine natural areas. Deforestation has significance beyond the loss of trees as it also hastens soil erosion, reduces the water retention capacity of the landscape, and exacerbates the problem of global warming.

61. Deforestation usually comes as a direct result of air and water pollution. Acid rain is a frequent phenomenon in and around industrial areas. Thousands of hectares of mountain forest were lost due to SO2 and NOx pollution emitted by power plants fueled by hard or brown coal. Deforestation is also reported as a result of intensive logging for fuel by local populations. In some parts of southern CEE deforestation has been caused by extensive fires, the conditions for which were set by recent years of extremely dry weather.

The response

62. The list of environmental problems identified here is certainly not all inclusive. Other problems, including those of particular importance in individual countries of the region could be listed. The priorities shown above are those most frequently mentioned. Such an inventory and ranking of problems, however, is still not an adequate basis for successful environmental improvement action. Methodological capacity and managerial skills are needed to formulate clear environmental policies and law. These in turn can help to identify useful tools and procedures as well as require consideration of the economic and political impacts of proposed programs. For such policies and laws to be effectively implemented expertise in a variety of fields is needed as are strong public support for environmental protection, sufficient financial resources and modern technologies. Though major challenges, these elements must be gradually realized.
VII. Critical steps to be taken to start or continue environmental improvements

Management and administration

63. Improvements in environmental management and administration are widely recognized throughout the region as essential. The CEE countries lack coherent methodologies to properly address problems identified in the physical environment, and cooperation and coordination amongst the relevant organizations, institutions and agencies is inadequate. Fundamental questions such as: who is responsible; what type of action should be taken; how to assess the impact on other required activities; and how to generate and balance necessary financial means need urgent attention. While none of these issues is directly environmental, their resolution bears heavily on the success of any environmental protection efforts. In the course of establishing environmental priorities it is crucial to design and activate mechanisms which can lead to the smooth implementation of identified solutions. Environmental programs need to be professionally designed, planned, and evaluated and should represent well integrated elements of an overall environmental policy at the national or local level. Such integration is currently limited in part by the insufficient level of cooperation between government offices and ministries having major influence on environmental protection. It is reported that official policies of the Ministries of Industry and Finance are sometimes in direct conflict with the policies of the Ministries of Environment. Additionally, most environmental protection programs are organized strictly along specific environmental media lines (i.e. air, water or soil) and thus the interdisciplinary approach most agree is necessary does not commonly exist. The solving of these issues requires a certain methodological capacity to ensure that appropriate resources, procedures, and tools are put together, harmonized, and used. Strong and enlightened leadership in government administrations and parliaments is also essential. The establishment of methodological capacities and the formulation of an integrated approach can be considered critical steps for any progress in protecting the physical environment.

64. Managerial skills are an additional element missing in the region and are necessary for creating and guiding the methodological capacity required for environmental protection. There is a huge gap between Western and Eastern managerial practices and although the proactive and very focused nature of Western management is not always suitable for directing work in CEE countries, there can be no doubt that substantial improvements in management skills are needed in the region and Western experience can be helpful in this regard. Besides better skilled managers, successful environmental programs require qualified staff who are capable of performing at the standards set by the demands of existing challenges, and under the conditions present in contemporary CEE. Unfortunately, there is a lack of such staff at this time and extensive training is required to address this need. (When qualified staff does exist in government administrations, they are difficult to retain because of the low salary levels.)

65. The impacts of environmental protection efforts on other environmental activities as well as on economic and social programs need to be assessed, and the methodological capacity described above provides the base from which this can be accomplished. A variety of mechanisms exist to help with such assessments and these are beginning to be used in the region, though this trend should be accelerated. Environmental impact assessments and environmental audits are reported as already in use (on a limited scale) in the CEE countries. There are also several tools that can be used to promote environmental protection in a market economy. Environmental charges and non-compliance fees for pollution discharges are effectively employed in some countries, and non-financial instruments, such as permits and compliance schedules, are also used as positive options.

66. Standard business practices also strongly influence the effectiveness of environmental protection endeavors. As in government organizations of the region, environmental management capacities of business are as well far from ideal. Though economic reforms have forced businesses to become more conscious about their use of natural resources and production of waste by-products, commercial enterprises still lack experience in responsible environmental management and their willingness to pay for environmental protection is weak. The situation is exacerbated by the competitive pressures businesses are under to "profit now" and cut costs wherever possible. While the "polluter pays" principle (under which polluters bear financial responsibility for environmental clean-up, and are thus encouraged to implement pollution prevention measures) has been widely adopted in the West this is not yet the case in the CEE countries. One obstacle to effectively utilizing this principle here is the financial hardship that some businesses find themselves in, which has resulted in reduced environmental investments and shortfalls in National Environmental Funds. Another obstacle is the fact that privatization of industrial enterprises is still in progress, meaning that the State remains owner of many facilities and is thus in the paradoxical position where it is technically both the regulator and the regulated.
Enforceable environmental policy and law

67. An effective and enforceable environmental policy can be developed only after methodological capacity has been improved and strong environmental administrations, able to meet demands for action, have been created. It is especially important to stress that these initial two steps are critical prerequisites to building a practical environmental action program on the national and local levels.

68. An enforceable environmental policy must have several important characteristics including:
- integration of diverse interests represented in the government and public;
- focused and well-targeted environmental goals; and
- financial and technical feasibility.

Apart from being focused on practical goals, environmental policy should take into account the impacts of proposed activities on other environmental goals and economic undertakings. Support from diverse interest groups assures greater internal integration and allows for coordinated action. Technical and financial solutions must be sought which maximize the efficiency of environmental programs.

69. Environmental policy that facilitates proper enforcement is critical to properly start and continue environmental improvements. It should provide directives for carrying out environmental programs on the national and local levels, as well as in different sectors of the economy. It should also address obstacles which can only be gradually overcome. Therefore, environmental policy should be sensitive to changes taking place in the economy and society as it may be assisted or hindered by those changes.

70. The state of environmental law varies considerably amongst the countries of the region. While some have developed quite extensive contemporary legislation others are still relying on old laws established under previous political systems which are largely inappropriate for the current circumstances. Some gaps and weaknesses in environmental law exist in all of the countries which also leads to the absence of necessary regulations. Comprehensive yet practical environmental law is crucial as it legitimizes a clean environment as a social priority, provides government administrations with the authority to act and guides the development of regulatory policies and improvement efforts. *Practical* environmental law is emphasized as a need on the one hand because currently law enforcement is regarded as the weakest element of existing environmental protection systems in the CEE countries, while on the other hand, law which is too strict renders enforcement unrealistic and provides incentives for illegal activities.

Expertise and public support

71. Improved expertise in a wide range of areas, especially those discussed above, is necessary for the CEE countries to successfully confront the numerous challenges they are faced with. While there are many qualified people and scientific specialists in the region, this expertise tends to be narrowly focused or technical in nature. New skills and knowledge are required in order to effectively deal with the changes brought on by free market reforms and democratization, and to properly address environmental legacies of the past. New economic realities require updated procedures for allocating funds, designing solutions, and selecting tools. Training in financial management, budget writing, seeking funds, project evaluation and auditing is already offered in some CEE countries. Training in procedures used for the preparation of environmental programs, as well as in designing and employing different environmental protection tools, is critical for starting and continuing improvements under the new circumstances. Local and national government administrations are primary targets for training in these areas. A well prepared and professional civil service is a goal declared by many governments in the region. This would require intensive training, but should yield qualified and dedicated environmental administrations. Due to several factors (low level of compensation, administration reforms, staff qualifications) environmental administrations have a limited capacity to act effectively. Other target groups for training are businesses and citizens active in environmental NGOs. Western assistance programs have a crucial role to play in designing, implementing, and maintaining environmental training courses, which provide practical instruction, strategic planning skills, and professional education.

72. Most environmental experts in the region agree that the environment has fallen far on political, economic and social agendas. In order for environmental administrations to be able to properly enforce laws and implement policies, and to encourage businesses to adopt environmentally friendly operating procedures, an atmosphere of strong public support for environmental protection must exist. While awareness of environmental issues within the region is rising, this has not translated into widespread active support. It is necessary to foster understanding and appreciation of the vital significance of a sustained healthy environment within all social sectors, from business leaders to politicians, and school children to industrial workers. Comprehensive information and education campaigns are needed at the local and national levels. As public awareness and concern for environmental issues grows, citizens will become more motivated to solve environmental problems. In the new democracies of the region this motivation can be channelled into citizen initiated environmental protection activities and public participation in environmental decision-making. A high level of environmental awareness is likely to prompt citizen groups to demand stricter measures that require polluters to be in compliance with environmental standards. Public interest and support, as well as participation in environmental debates, will help to avoid environmental degradation. Public participation in environmental decision-making complements the enforcement of environmental regulations. During the transition period of the
CEE countries, public participation and pressure is especially necessary to compensate for weak environmental law enforcement or the absence of environmental regulations.

**Economic and technological resources**

73. Greater financial resources are critically needed by CEE countries as they attempt to address environmental liabilities. Current sources of domestic funds are simply inadequate to solve the problems and, while foreign assistance is helpful and needed, the countries are bearing, and will continue to bear the brunt of environmental expenditures on their own. The economic hardships encountered as part of the transformation are adversely impacting environmental protection. It is unlikely that major new sources of funds, domestic or foreign, will appear. Given this, a strong emphasis on maximizing the cost-effectiveness of environmental expenditures is essential. New opportunities for increased funds and more efficient use of existing resources are provided by various market instruments which are likely to play an increasingly important role in the future.

74. Related to the lack of funds in the region is the need for modern technologies. Many of the environmental problems in the CEE countries result from the operation of obsolete, inefficient production systems using outdated technology in conjunction with poorly functioning or completely absent environmental protection equipment. New production and environmental technologies of all types are needed but they are slow in coming as the costs are often prohibitive for the public as well as private sector.

**VIII. Driving forces of environmental improvement and degradation**

**Opportunities for improvement**

75. The CEE countries are undergoing fundamental changes. In reshaping the structure of their economies, there are social and political consequences. The transition is proceeding under pressures created by social and economic needs. This provides a unique climate for introducing environmental improvements, but may also lead to further environmental degradation.

76. Environmental protection has never been a real factor influencing economic and financial decisions in this region. On the contrary, economic development has led to environmental damages, while currently the scope of environmental investments is still being discussed. Market-oriented reforms activate different, sometimes conflicting, forces. Democratization of these societies is a visible achievement. Privatization of state-owned enterprises is providing a basis for more efficient production. Western consumption patterns are altering the traditional social values and behavior of consumers. In addition, international competition is stimulating the introduction of new products and new trading practices. All these forces contribute to driving the transition to new economic and social systems. The same forces could be used to support environmental protection needs.

**Democratization**

77. Democratization and its resulting effects on social, economic, and political life are driving the replacement of standard methods and procedures of the previous system. Democracy means, among other things, easier access to information and the freedom of opinions and expression. Democratization of society also has an educational dimension. The active and focused involvement of citizens may improve their ability to make judgements when facing conflicting goals. Greater access to information is having positive environmental impacts. It motivates the public to demand environmental improvements. A critical step in this direction would be to realize a transition from the making of emotional judgements to a participatory process of sound environmental decision-making that involves an educated and informed public.

78. Democratization of the CEE countries has resulted in new contacts and relationships with nations outside the region. The CEE countries are becoming open, which means that more frequent contact with foreigners and a valuable exchange of experiences are taking place. This influences opinions formulated by CEE environmental activists on both successes and failures of the Western environmental protection programs. There is a growing consensus that the passive copying of environmental protection strategies, instruments and procedures developed in Western countries is not an appropriate solution for the existing environmental problems in the CEE countries. The understanding and application of some Western environmental protection practices, however, should help in establishing a pragmatic approach to environmental problems in this region.
79. A product of the new democratic systems which is developing quickly in the CEE countries is the citizens' environmental movement. Thousands of formal and informal, non-governmental pressure groups have been established in recent years to lobby and act for environmental goals. This is a major achievement of the CEE societies and a valuable asset for the future.

80. Democratization of the political arena has altered the way power is exercised. The CEE countries are in the process of reforming their government structures. Independent self-government systems are being created on the local and regional levels. This development has potentially huge impacts on environmental protection activities. Experts do not agree when attempting to determine the environmental consequences of administrative reforms aimed at restoring democratic procedures at the local level. There is evidence of poor environmental performance by local government authorities and elected officials in counties and towns. The self-government system has, however, the potential to address environmental issues in a more responsible and practical way because of its ability to directly assess the relative importance of different needs expressed by local populations.

Privatization and economic restructuring

81. Forces that have been activated by market reforms are the most important for achieving environmental improvements. The mechanism for distributing financial, material, and human resources within the economy has been significantly altered. Incentives for the development and expansion of the free market may contribute to the acceleration of environmental pollution. They may also work towards environmental improvements, if harnessed and modified.

82. Some key economic processes taking place in the CEE countries are not driven solely by market forces. Privatization of state property along with administrative measures aimed at structural changes in industry and agriculture are inspired and implemented by governmental entities. The government decides to what extent environmental considerations are introduced into the wider set of goals that must be realized through these processes. The tendency of excluding environmental goals from the benefits which should be accomplished through privatization of properties and restructuring of the economy is a real threat in some of the CEE countries.

83. The free market is an indirect regulatory system which operates through financial incentives and disincentives. It may promote more efficient use of natural resources (e.g., liberal energy pricing, fuel taxes), or it could allow for the poor environmental performance of producers (e.g., low level of environmental charges, liberal import tariffs for raw materials and fuel). The CEE countries must still decide on the role of market incentives in their environmental protection strategies.

84. The extensive ownership changes occurring throughout the CEE countries pose especially serious threats to the preservation of natural areas. Small businesses emerging from the privatization process are aggressive in their exploitation of environmental resources. Big businesses tend to prefer being located in relatively clean areas. There is a potential threat that new enterprises will avoid engaging in clean-up activities of the polluted industrial centers. At the same time, by moving into new areas they may put natural ecosystems at risk, and such areas should be protected as the countries' natural capital.

Western consumption patterns

85. The current desire to attain Western consumption standards is providing the general motivation for production and growth. Material consumption influences the system of values, as well as the behavior of individuals. Wasteful consumption is beginning to be a symptom of success in the CEE countries, which cannot be counterbalanced, even by a well-developed and organized environmental protection system. Modest and environmentally responsible behavior is gradually being replaced, especially in rural areas, by more aggressive and exploitative activities. A "free rider" type of mentality is socially tolerated as a typical market-driven product. The environment is being abused by both the region's endemic consumption practices and by new patterns imported from the West.

86. Advertising is playing a rapidly growing role in creating demand and establishing new consumer consumption models. Environmental concerns are rarely included in commercial advertisements used in the CEE countries. This is reflected in the low environmental awareness of consumers and the priorities that drive their decisions. There are no independent activities introducing environmental advertisements into the market. The government is reluctant to use paid advertisements to promote the sustainable behavior of consumers due to its lack of experience and because it does not want to interfere with business activities.
87. A successful market economy in today's world economic system must have a major international component. While accepting market forces as a decisive development factor, the international character of economic activities must be accepted as well. The CEE countries are under pressure from foreign competitors, and compete among themselves as well. This may drive environmental protection in a positive direction (e.g., clean technologies, sound management practices). Outside pressure may also result in environmental degradation (e.g., waste imports, development of "dirty" industries, wasteful consumption patterns).

88. Steering economic and social development toward achieving environmentally positive impacts in the face of international competition is a difficult, but essential task. The CEE countries are receiving assistance to build up their competitiveness on the international market. Protectionist solutions proposed as environmental remedies are equally inappropriate as liberal ones that neglect a country's specific environmental requirements. An environmental ideology must be formulated and put into practice which will allow a proper balance between international pressures and domestic needs.

Opportunities ahead

89. The forces currently driving social, political, and economic changes in the region should be consciously utilized to push forward environmental protection efforts. A sustainable development model assumes that environmental improvements should be driven by the same forces that stimulate economic growth, social welfare, and political stability. The biggest opportunity for the CEE countries in the transition period is to properly use these forces and make them a vehicle for persistent improvement in the state of the environment.

90. Many experts see the dynamic changes observed in the CEE countries as providing a unique opportunity to achieve immediate environmental improvements and longer term environmental maintenance. There is great potential to progress in terms of social and economic development, but also in terms of environmental improvement, while building new political, economic and social systems. None of these dimensions should be compromised, as they constitute the interrelated elements of a successful system as a whole.

IX. Integration of environmental protection and economic development

Environmental impacts of economic transformation

91. The ongoing economic transformation is reported to be the most powerful and influential driving force effecting the creation of new economic, political, and social systems. It is carefully observed and evaluated by different interest groups. The impact on the environment of particular economic tools or programs is also debated. Less attention is being given to the assessment of the integrity of the overall transformation process.

92. The majority of economic decisions has a real impact on the environment. Privatization programs, pricing policies, taxation, and tariffs all influence environmental protection. Supply and demand mechanisms incorporate economic incentives into environmentally related activities. These economic activities are not dictated by environmental principles, unless full integration of environmental and economic goals is achieved.

93. There is a mutual dependence between the environment and the economy. Economic development may contribute to environmental improvement (or degradation), but the environment also is an important factor of economic development. As an example, there are proposals to use environmental protection as a vehicle for reducing unemployment. Labor intensive activities may be offered by environmental sectors (e.g., agriculture, forestry, manufacturing of environmental protection technologies).

Obstacles to integration

94. The understanding that a healthy environment and a sustainably strong economy are mutually dependent and interrelated is not widely held in the region. The benefits to be gained from integrating economic and environmental concerns need to be clearly illustrated and emphasized, rather than the conflicts involved in such integration. The "win-win" opportunities are substantial in a wide range of areas including energy conservation, waste recycling, and materials savings. Issues generating conflict have thus far been more publicized than the benefits to be gained, and some environmental damages have been presented in a defeatist light as irreparable (e.g., land reclamation, discharge of gases, and waste water).
There are impediments to turning "win-win" options into reality. First of all, there is simply very little precedent in the region for successful integration of environmental protection and economic development as priorities on an equal plane. It is reported that most decision-makers simply do not understand the true importance of environmental integrity and thus do not give them adequate consideration. The agendas of government officials and politicians are dominated by economic issues and to this point the pro-environment lobby has been unable to convincingly demonstrate the fundamental link between the state of the natural environment and a nation's economic well-being. This link has also not been made clear to the general public and thus public demand for the inclusion of environmental concerns in economic development programs remains weak. Other obstacles include the lack of legislative and policy mandates for such integration as well as the lack of experience and expertise in planning and designing these needed laws and policies. There are also few examples of successful environmental businesses in the region. Another reason could be the difficulty in agreeing on a "common language" for presenting economic and environmental arguments. Environmentalists are often not able (or willing) to understand the positions of businesses or government economists, while businesses and economists seldom place great value on the non-commercial use of environmental resources. A vision for a society with both prosperous citizens and a healthy environment needs to be conceptualized and gradually implemented through integrated economic and environmental policies.

Positive trends

Combined environmental and economic planning is reported as taking place on the local level in some CEE countries, though concrete examples of existing sustainable development were described as sorely lacking. Citizen groups are initiating informal processes for promoting local "green" businesses. Alternative local and regional development programs have been created to integrate the environment and the economy. The majority of these programs promote environmental agriculture or ecotourism, but some also support industrial production based on clean technology. These programs serve as testing grounds for developing clean production strategies and could become powerful education models.

Evidence of attempts to integrate the environment and the economy are also visible within the governments. Intergovernmental bodies (committees) are being created to establish programs that can simultaneously provide economic and environmental benefits. Initiatives such as a "green" taxes, eco-labeling, environmental impact assessments, environmental auditing, etc., are supported by governments in some CEE countries. This reveals a growing interest in integrating environmental and economic goals and activities.

There is also the potential for building environmental considerations into business-oriented programs initiated with the support of Western financial assistance. International treaties also impose environmental conditions on certain business projects. Environmental targets that are in line with Western standards have been established for CEE countries in order to facilitate harmonization of their environmental policies. The rapid development of Western businesses in the CEE countries should also be used to stimulate progress in integrating economic and environmental policies.

X. Financing environmental improvements

The State Fund for Environmental Protection

Some of the CEE countries have developed fairly extensive systems for financing environmental improvements, while others are still in the early stages of devising such mechanisms. State Funds for Environmental Protection have been organized in some CEE countries to provide grants and soft loans for environmental investments. The financial resources for these Funds are usually collected through discharge fees and non-compliance fines imposed on polluters. Governmental subsidies, various environmental taxes, interest from the loans, etc., add additional money to the State Funds. There is widespread support to organize State Funds for Environmental Protection in the CEE countries that have not yet established them.

The special arrangements made to establish State Funds for Environmental Protection illustrate the urgent need for a stable flow of funds for environmental protection measures. However, it also demonstrates a lack of integrity in the overall economic and environmental programs. Funds earmarked for environmental protection are excluded from any use except direct environmental improvements. Thus, direct environmental investments are considered a higher priority than sustainable investments which satisfy and integrate vital economic and environmental needs simultaneously.
101. The separate financial system which provides funds for environmental improvements is a consequence of the segregated approach to economic and environmental considerations. As the idea of sustainable development is still in its initial phase, a special system for funding priority environmental projects is justified, and will continue to play an important role in the CEE countries during the transition period.

102. Procedures for disbursing and replenishing environmental funds need to be improved. Priorities should be based on an established environmental policy, but realistic and balanced environmental policies remain pending in most of the CEE countries. The management of State Environmental Funds also requires improvement. Professional, financial management backed by an in-depth understanding of environmental problems are the most frequently mentioned needs in this regard. A stable staff and transparent procedures for the operation of the State Funds are highly recommended by experts, as well.

Economic instruments

103. Environmental protection is supported not only by subsidies provided by the State Fund, but also by incentives created by economic instruments. These instruments can generate payments which redirect funds to environmental protection. The potential fund-raising role of economic instruments is, however, hindered in some CEE countries due to high inflation and the bankruptcy of the largest polluters.

104. Economic instruments are also seen as a tool for motivating companies to reduce pollution. In the CEE, however, environmental charges and non-compliance fees are often ineffective as incentives to reduce pollution because it is usually cheaper for polluters to simply pay the fines than to implement abatement measures. The bigger the savings from not treating waste, the lower the incentive role economic instruments play. Experts assess that charges imposed for pollution discharges in the CEE countries are many times lower than the waste purification costs. Thus, there is little incentive to reduce pollution from a company's financial point of view.

A prospective environmental financing system

105. The role of public spending for environmental protection will remain decisive in the transition period. While market forces are playing a growing role in encouraging environmental investments in the private sector, governments will continue to provide the majority of funds for necessary environmental improvements for some time to come. There is still a large state-owned sector of the economy that requires environmental subsidies. The state must also provide funds for local and regional governments to meet their environmental requirements.

106. The general concept of funding environmental protection needs to be changed in the CEE countries. Environmental protection measures should be paid for by those who benefit from using the environment for their business purposes. Users of the environment must be more involved in and responsible for solving local environmental problems. Communities should also be prepared to provide funds for environmental protection activities.

107. The "polluter pays" principle must be fully adopted and enforced in the CEE countries. Income generated at the expense of the environment should be reverted to restore the damage. The polluter pays principle should improve the impact of economic instruments on investors' decisions. It should also allow for profitable production, while eliminating negative environmental consequences of that production.

XI. Foreign environmental aid

Evaluation of environmental aid

108. Projects to be supported by foreign aid are selected by each country's environmental authority and by donors. Initially, it took some time for the donors and recipients to agree on expectations. Nevertheless, a considerable amount of foreign environmental aid has flowed into the region in recent years. Numerous examples of successful environmental protection activities which were supported by foreign donors were cited: training has been provided to government officials, business managers and NGO activists; environmental policies and institutional structures have been strengthened; environmental assessments, inventories and feasibility studies have been conducted; monitoring systems have been designed and established; major investments in technological capital have been made; and the list could go on. Early assistance was usually in the form of technology transfers and advice for solving the most acute problems. As a side benefit, business opportunities have also been created through the availability of the assistance funds. As a result, many Western and Eastern businesses have contacted each other and joint-ventures have been started based on jointly implemented projects. While environmental aid has been very helpful in many ways, many experts pointed out that it has not been equally distributed within the region and that it still amounts to a very small portion of overall environmental investments in the region.
109. In the course of implementing projects supported by foreign assistance it became clear that the engagement of the CEE countries’ own staff to manage projects was critical for achieving positive results, despite their mistakes and delays. Through the process of participating in foreign aid supported activities, project management skills have been acquired by many CEE government and business managers.

110. Environmental assistance also helped to encourage public participation in environmental protection projects. In some cases there was a formal request from donors to use a participatory procedure, while arranging the implementation of a project financed by an assistance fund. Western experts held meetings and made field visits to discuss environmental issues with the local people. Steering committees were also used as a tool for bringing local people into the project. This type of development will have a tremendous impact on establishing democratic procedures in different decision-making bodies and economic sectors.

111. Some negative experiences with foreign assistance were also reported by the experts. A large amount of money has been invested in assessments and feasibility studies, often without practical improvements in the environment resulting. Moreover, these numerous studies and reports have usually been prepared by very costly western consultants making short-term visits to the region and have often failed to meaningfully involve local and national experts who have direct knowledge of the issues. Other experts explained that the priorities of the donor organizations are not always compatible with the priorities of the recipient CEE country. In some cases, assistance advances the interests of the donor to the long-term detriment of the environment in the region. Most of the experts understood that aid is usually intended to provide benefits for the donor as well as receiver, but they suggested that there should be better ways of maximizing the positive practical environmental effects of such assistance. The experts admitted that CEE countries need also to develop proper frameworks to coordinate, absorb, and manage Western environmental assistance.

Priorities for assistance

112. There is a consensus among CEE environmental experts that foreign aid should play the role of catalyst in environmental improvements. Hence, these funds should be used to improve procedures, technology, and the country’s own capacity to analyze and address environmental problems. Western assistance is instrumental where specific expertise and knowledge is missing (management, environmental legislation and enforcement, auditing, and assessing environmental impacts, etc.) Foreign financial assistance is limited and should focus on achieving long-term benefits. This should ultimately lead to greater efficiency in a country’s own spending for environmental purposes. Initially, financial assistance focused on establishing the infrastructure and expertise necessary for efficient, effective improvements. Now the countries are more prepared to channel foreign assistance into practical environmental improvements. Given the limited assistance available it is important to utilize this potential in the optimal manner.

113. Proper environmental management and decision-making require correct information. Foreign aid has been largely used to develop environmental monitoring and environmental information processing systems in the CEE countries. Quality control and monitoring are important conditions for successfully enforcing environmental standards and introducing compliance schedules. Although costly, environmental monitoring should pay for itself in better and more accurate environmental decisions.

114. Foreign aid for environmental protection has mostly been spent on environmental hot spots. The outputs from these expenditures have often been feasibility studies, which only serve as preparation for an investment phase. This activity is criticized by CEE experts as “paper work,” or an information collection exercise. In the role of catalyst, foreign aid should be allocated to pilot environmental investment projects and only then on follow-up investment stages which should be arranged primarily with the investor’s own financial means. Demonstration projects provide the best educational opportunity, while serving environmental protection goals.

Harmonizing policy

115. An additional role of foreign aid is to stimulate the process of harmonizing the environmental regulations of the CEE countries with those of the European Union. This process has immediate, as well as long term, importance. Revisions to the legal requirements imposed on investors in the CEE countries are being made in order that they be compatible with the regulations of the European Union. This should help eliminate barriers for developing businesses. A common methodology should be adopted while establishing environmental regulations to avoid major discrepancies. Harmonization of economic instruments should help investors interested in CEE countries through the establishment within the region of conditions similar to those in the European Union.
116. An assessment of the disparities between regulations in the CEE countries and the European Union is currently being conducted. A time schedule for adjustment will result from this study. Considerable time will be required to unify environmental protection regulations of the European Union and the CEE countries.

117. The issue of harmonization is not equally assessed by experts. Some of them stressed the educational aspect of this exercise and the mutual benefit from studying existing environmental regulation systems. Others want to see a more focused harmonization of programs for both legal and economic instruments, supplemented by small-scale demonstration projects. All agree that the full-scale benefit from harmonization will only be available in the distant future.
INTEREST GROUPS

XII. Key players

Who are they?

118. The notion of environmental protection is perceived differently by the various interest groups in the CEE countries. Their energies may be jointly harnessed on behalf of environmental improvements despite conflicting motivations. Their common interests are sometimes strong enough to allow for the creation of coalitions. Interests represented by coalitions are often better defined and more powerfully presented than those of individuals. This definition of interests also enables potential conflict areas to be identified and addressed.

119. The following environmental coalitions were identified by experts as playing key roles in environmental protection in the CEE countries:

- national and local governments and politicians
- businesses and trade unions
- NGOs (including scientists and the media)
- consumers (the general public)

The above-mentioned groups are not mutually exclusive. People can play concurrent roles in more than one of these sectors. However, dominant interests tend to lead individuals to support one sector to a greater degree than the others.

120. A politician's or civil servant's perspective regarding environmental problems is strongly affected by his or her own role and function. Devising policies, implementing projects and enforcing the law is the role of the environmental administration. Within this body a formal and sometimes bureaucratic approach to emerging problems is typical. In contrast, re-election concerns may make politicians overact in pushing towards visible and quick results in environmental protection, while other issues such as economic priorities may push environmental problems off their agendas.

121. The common interest of business and trade union coalitions is to maintain employment opportunities and to improve work-place environments, rather than to protect the external natural environment. Jobs may be created by more efficient use and stricter protection of existing natural resources. The implementation of environmentally-oriented public works is a promising tool for the reduction of unemployment, but remains an under-utilized option to this time. In addition, businesses are increasingly sensitive to their public image and are beginning to want to appear environmentally friendly to their customers.

122. NGOs, scientists and the media are emotionally and intellectually involved in protecting the natural environment. Their environmental coalition advocates the rights of future human generations and wildlife, stresses the physical limits of the natural environment and disseminates environmental information to the general public. This coalition is also interested in counterbalancing the negative impacts of the other coalitions' activities.

123. The interest of consumers is to maintain access to healthy food and to secure environmental quality in their living areas. They are not as well organized as other coalitions, but consist of a large number of people. If this group was to organize and mobilize its resources it could be a major force impacting the environment.

124. The coalitions of environmental interest groups described above are not equally strong or developed in the CEE countries. There is also a trend for these groups to polarize and dispute conflicting issues. For meaningful progress to occur in environmental improvements it is important to encourage a willingness to cooperate among the different environmental coalitions.

Can they do better?

125. The chances for the various coalitions to achieve their goals differs. Experience, dedication, and the support of society increase the chances for successful environmental campaigns, while the shortage of funding, the poor profile of proposed technical solutions and the resistance of other interest groups reduce the chances for success. The day-to-day living problems encountered in the transition period inhibit the engagement of most interest groups in environmental issues.

126. A falling of environmental priorities on government agendas has diminished politicians' interest in engaging in environmental debates. The governments of the CEE countries are generally passive in addressing environmental problems. More detailed and practical environmental programs, as well as greater public demand are needed to make the governments work more effectively.
127. Improved business practices with respect to the environment are also not likely in the near future, due to the lack of clearly demonstrated links between environmental performance and profit. Environmental protection is still not recognized as a prospective market, or as an economic sector which may contribute to the creation of a new market. "Green" action by trade unions is only weakly motivated.

128. NGO movements have progressed tremendously during the past five years. There are many independent environmental groups in the CEE region (about 1800), some of which are well organized and trained. NGOs in the CEE countries have not realized their full potential due to funding constraints, poor cooperation, and the lack of certain skills and strategic planning. They do, however, possess the necessary motivation to perform better and to increase their influence on their respective countries' environmental protection activities.

129. A more visible role for consumers in pushing environmental protection forward is also needed and expected. Awareness raising campaigns have helped in stimulating environmental concern amongst consumers. Health and environmental safety issues can be strong forces for pushing consumers toward environmental protection actions.

XIII. Need for environmental lobbies

Prospective motives

130. Environmental coalitions and interest groups continue to evolve and mature in the region. It is likely that the evolution of environmental coalitions will repeat Western experiences. Greater polarization of interests is also expected along with a rise in conflicts.

131. Environmental coalitions can be effective vehicles for articulating the interests of its members. A coalition is willing to lobby or fight for particular environmental goals. There is a need to develop strong effective environmental lobbies in the CEE countries which have the capacity to stimulate environmental improvements.

Value-based lobby

132. The intrinsic value of the natural environment serves as a motive for its protection and improvement. The environment should not be compromised by economic goals because of its other immense values. All living creatures have the right to exist and to use environmental resources. It is not only the commercial value of environmental resources that make them valuable, but also the intrinsic value associated with their role as components of nature. This justifies prudent environmental protection.

133. The value-based lobby, in its orthodox form, is sometimes unlikely to work towards integration of the environment and the economy. Within this ideology, the value of untouched nature is placed higher than the benefit obtained from its economic use. Traditional agriculture is proposed as a sustainable way of living in close contact with nature. However, some value-driven interest groups also embrace more moderate approaches that allow for the coexistence of nature and industrial production, provided that damages are not permanent and held to a minimum.

134. Value-driven environmental coalitions are most often represented by environmental NGOs, scientists, and the media. Such a coalition having well developed skills and expertise has an important role to play in influencing the selection of the country's future development strategy. Two vital elements of this role are environmental education and awareness raising. Short-sighted economic policies may also be counterbalanced by value-based environmental arguments and practices.

Image-driven lobby

135. Environmental arguments are often used to achieve non-environmental goals. A green image is slowly becoming important for politicians and businesses. They want to demonstrate the same environmental sensitivities as their electorate or customers. This process is beginning in the majority of the CEE countries. Attempts by politicians or businesses to build "green" images may have positive environmental impacts, especially if supported by concrete actions. The hidden goals (re-election and profit) may bring about environmental protection activities which integrate environmental and political/economic objectives. A "green" image requires considerable improvements in technology and economic programs. The "green" image-driven lobby may help to establish working standards that could also indirectly guide environmental protection efforts of other politicians and businesses.

136. Civil servants and politicians create a modest core of the "green" image-driven environmental coalition. Businesses are still only a promising future member of this group in the CEE countries. However, there is already evidence of a growing business interest in being labeled as "green" by NGOs or media.
Welfare-driven lobby

137. A clean environment is an essential requisite for welfare. The environment may become a value for those whose living conditions are strongly affected by environmental degradation. Degradation of a nearby environment often mobilizes citizen groups to protest about that specific issue while more general environmental concerns are not fully recognized. The need for a clean and healthy living environment may unify diverse interests.

138. The environment is perceived as a component of welfare and well-being. When a secure and healthy living environment is threatened, it can easily mobilize local residents. People who live in industrial zones are often ready to compromise their income to have environmental safety improved. The argument for safe and healthy places for children to play is often used during discussions about environmental hot spots in the CEE countries.

139. Consumers and trade union members, as a welfare-driven pressure group, sometimes act in favor of environmental protection. The development of this coalition has been slow and difficult because of many conflicting goals (e.g., cheap products and more working places). The usual objective is to keep the environmental protection standard above a certain level while fighting for other goals. Trade unions are also sensitive about the indoor environment of working places. Although nature protection is not a goal of many CEE trade unions, environmental arguments sometimes appear on lists of demands to governments or businesses. The strength of the welfare-driven lobby is in its potential number of supporters. This environmental coalition is just now beginning to form in the CEE countries.

Integration of positive approaches

140. In order to achieve a breakthrough in environmental protection in the CEE countries, an integration of different interests and approaches supporting environmental improvements must take place. The various groups should not focus on their different motives, but rather should search for measures that yield mutually agreeable results. The motives for taking environmental protection measures should be seen as less important than the real impacts of these different behaviors or actions. The readiness to negotiate and to search for environmentally beneficial compromises should become widespread among the different environmental interest groups.

141. Environmental lobbies have many common goals. One of them is to support the integration of environmental protection and economic development. The various interest groups should formulate different alternatives for successfully accomplishing this integration. Instead of stressing discrepancies in formulating environmental conditions for economic development, compromises should be sought which satisfy diverse interests. Achieving sustainable development in the CEE countries will heavily depend on solving this problem of cooperation among different environmental lobbies.
CONCLUSIONS

142. As the countries of Central and East Europe progress through fundamental political, economic and social changes, their citizens face an unprecedented period of transformation and uncertainty. It is clear, however, that the prospects for successfully adapting to these changes and for achieving economic prosperity and social welfare rest squarely on the shoulders of these same citizens. Similarly, the task of creating and maintaining a natural environment that can sustain such prosperity and welfare must be undertaken by those people who actively use and are directly effected by the environmental conditions of the region. This Strategic Environmental Issues Report brings together and illuminates the perspectives, experiences and outlooks of many of those individuals from the region who have made strong personal and professional commitments to shaping its development.

143. The future development of CEE countries is also addressed by the Environmental Action Program for Central and Eastern Europe (EAP), which was adopted by the Ministerial Conference in Lucerne in April 1993. The EAP proposes a methodology for addressing environmental problems and implementing solutions. An integrated and financially balanced program focused on local, national and regional environmental protection problems is recommended. The use of market incentives to prevent new pollution and to reduce existing waste is suggested. The stress is placed on assuring strict enforcement of laws and regulations. Cooperation among the CEE countries in exchanging experiences and developing joint undertakings is proposed among key recommendations. Training of environmental specialists and capacity building in environmental administration are listed as supplementary activities. Foreign assistance is seen as support to mitigate the CEE countries' contribution to creating global environmental challenges.

144. To a large extent the conclusions drawn from the comments provided by experts of the CEE countries mirror those conclusions presented in the EAP. However, it may be useful to repeat some of them with additional comments.

- Development of environmental/economic "win-win" measures. The transition period presents unique opportunities to integrate economic development and environmental protection so that both benefit. To address environmental liabilities from the past and ensure the potential for sustainable economic well-being in the future environmental and economic concerns must be seen as equally important and mutually dependent.
- Maximizing the cost efficiency of environmental investments. Funds available for environmental protection purposes are, and will continue to be, extremely limited in the region. To achieve the maximum benefit from these funds priorities should be clearly set and effective implementation measures established.
- Harnessing market forces for environmental improvements. Free market reforms are now the major driving forces in the region. These forces allow possibilities for improved environmental protection but they must be recognized, fully understood and incorporated into environmental strategies. New economic instruments for environmental protection can and should be used to take advantage of these market forces.
- Immediate reductions of severe environmental threats to human health. There are some localized "hot spots" in the region which pose serious risks for human health and the environment. These areas need immediate attention and short-term actions may be warranted while longer-term solutions are devised.
- Realistic, enforceable environmental policy and law. The state of environmental policy and law varies considerably in the region. While some countries have fairly advanced systems others are still relying on regulations established in the past. Enforcement is almost unanimously considered the weakest point of existing environmental programs. Modern policies and laws which fully reflect existing economic, political and technical realities are required.
- Substantial improvements in expertise, management and methodological capacity. Training and exchange of experience and information are needed to improve policies, management and project implementation skills for government authorities, businesses and NGOs.
- Modern production and environmental protection technologies. Many of the existing problems in the region result from a lack of proper technologies. Proven modern production technology which uses less raw materials and minimizes waste by-products, as well as advanced environmental protection equipment, are greatly needed.
- International and intergovernmental cooperation. The need for more effective cooperation between Western and Eastern governments, and especially between governments of the CEE region, as well as better working relations amongst the different government ministries and institutions within countries, are absolutely essential to maximize the positive effects of limited funds and to solve shared regional problems.
145. While this Report and the EAP discuss many of the same issues, certain themes and topics presented here received special attention from the CEE experts involved. These themes and topics represent a collective perception of environmental problems displayed from within the region.

- The significance of existing political, economic and social realities. The countries of the region are undergoing truly profound changes, the implications of which are not fully comprehended within the region itself, let alone elsewhere. The transition process is going to be long and difficult and environmental protection is but one, albeit important, element of this process. Current political, economic and social driving forces must be fully considered and accounted for in the development of environmental protection strategies.

- Existing environmental assets of the CEE region. The environmental damages of the region are well-documented. The natural capital of the region, however, goes under-appreciated. Europe's greatest biodiversity and large areas of pristine nature are currently being threatened by rapidly emerging, largely unregulated economic initiatives as aggressive business ventures seek to exploit new resources in the spirit of capitalism.

- Western development patterns. Consumer behavior is changing as new products become available and as marketing becomes pervasive. Consequently, new environmental problems are emerging. Environmentally harmful products such as automobiles and disposable plastic packaging are becoming widespread.

- Comprehensive environmental education. While much attention has been given to the need for professional training, not nearly enough has been done to initiate broad-based environmental education campaigns. There is a strong need to introduce environmental education into the school systems and to devise programs which will effectively reach adult members of the general public. Education is a relatively low cost option having important long-term benefits.

- Respect for the rule of law. It is almost pointless to discuss improvements in environmental laws when the rule of law generally is not accepted as a social norm. Public understanding and acceptance of the general concept of the rule of law is essential for the development of civil society and the proper functioning of any government administration.

- Obstacles to integrating economic development and environmental protection. There is no precedent in the region for such integration and no experience for how to accomplish it. In this regard, western experience can be very helpful. The pro-environment lobby has not yet been able to convincingly demonstrate to decision-makers how such integration can occur, and what the consequences of not following a sustainable development path will be. Economics are guiding the transformation yet most environmentalists are unable or unwilling to use language which economists can understand and vice-versa.

- Continued foreign assistance. It remains crucial but should not create false expectations. To this point much energy and resources have gone into assessments, studies, skill-building and methodological and institutional strengthening. While it has been and remains necessary, new focus should go on practical measures yielding concrete environmental improvements. The CEE region should also realize that foreign assistance may soon be focused on other regions, namely the NIS, and that it will remain a small portion of overall environmental expenditures. Therefore, the CEE countries should improve internal cooperation and take a more unified approach in approaching western donors.

- Cooperation between the different interest groups. Mechanisms and efforts to bring together governments, businesses, scientists, NGOs and the media must be devised and employed. The different motivations and perspectives of these groups must be understood and taken into consideration as public participation becomes more of the rule instead of the exception. These groups should focus on shared interests rather than positional conflicts, and combine their energies and comparative strengths to achieve common goals of environmental protection and sustainable development.

146. The conclusions of this Report and the recommendations of the EAP provide building blocks for designing local, regional or national environmental protection activities. However, successful use of the outlined findings will surely be influenced, and perhaps limited by current values, attitudes, behavior and practices existing in the CEE countries. Such limitations illustrate the difficulties of societies passing through a transformation to market-based democracy with mentalities and perceptions formed under a system of economic and social paternalism. The transition to a market-based economy will not succeed without a professional, methodological approach to solving important problems such as the region's environmental challenges but, the transition will also fail if the unrealistic egalitarian social values and passive attitude cultivated by the past remain dominant in the CEE societies of today. Methodological advice presumes a certain perceptual background or frame of reference on the part of the advice recipient. The experience and skills needed to effectively assess, and respond to evolving market forces are not fully developed in the CEE countries. Such skills and experience are absolutely necessary, however, to devise and implement an environmental protection strategy based on those forces.
147. For findings and recommendations such as those presented in this Report and the EAP to realize their potential worth they must contribute to practical outcomes in the real environment. In order to make practical use of the findings presented here, the acknowledged dilemmas resulting from the transformation must be overcome. In considering solutions to these dilemmas the following messages stand out:

- **The public must play a responsible and proactive role in environmental protection.** The value of high public awareness and sophisticated government policies will not be fully benefited from if there is persistent resistance to environmental protection efforts. Active and informed citizens participating in decision-making bring new strength to protection activities and give environmental administrations the backing they need to fulfill their mandates. As consumers, citizens can also motivate businesses towards improved environmental practices.

- **Decision-makers must have the necessary knowledge and capacity to implement market-based solutions.** Leaders in government, business, NGOs and academia must acquire expertise in the full range of market-based environmental protection strategies and mechanisms and they must develop the capacity to implement them under the current realities existing in the region. Foreign assistance is critical in this area as such expertise is very limited in the CEE countries. While activists must be prepared to use economic arguments in environmental debates, businesses and governments must be open to considering alternative solutions.

- **A deeper appreciation of the importance of environmental protection must be cultivated in the society.** The evolving values and attitudes in the CEE countries must be addressed, with real resources going to support concrete efforts aimed at reducing harmful behavior patterns. An atmosphere needs to be created in which businesses and industry can contribute to solving environmental problems. Conditions conducive to voluntary changes in practice should be created whenever possible, with market incentives and public attitude playing influential roles. Positive examples of environmental business practices should be identified, supported and replicated.

148. The ultimate factor which determines the prospect for environmental improvements in the CEE countries is rooted in people's reactions, attitudes and practices formed in the past political system. The hidden areas of the transformation, consisting of human values, perceptions and expectations, are decisive for absorbing and effectively using the new tools available in a market economy for environmental protection. Experts of the CEE countries very often discussed the problem of current environmental decisions being made based on outdated perceptions of social values and development forces. Progress in better understanding market forces, and the values and behavior that they engender, by environmental activists and decision-makers is crucial to achieve environmental improvements. As experience, knowledge and skills are acquired in the CEE countries perception of strategic environmental issues and their solutions is likely to evolve towards adopting the professional methodological approach proposed in the Environmental Action Program. However, how this perception evolves should itself be considered a strategic issue.
INTRODUCTION

This Annex summarizes the results of the needs assessment of the Strategic Environmental Issues project. Surveys were conducted in each of REC's constituent countries between October 1993 and April 1994. Using a standardized questionnaire, nearly 150 experts coming from each country of the region, variously involved in environmental issues (from national and local governments, enforcement institutions, parliaments, businesses, research institutions and NGOs), were extensively interviewed. The assessments were conducted by Andras Bezegh (Hungary), Sergiu Cristofor and George Romanca (Romania), Patrick Francis (Poland, Bulgaria, FYR Macedonia and Romania), Marijana Ivanova (FYR Macedonia), Jürg Klarer (the Czech and Slovak Republics), Voline van Teeseling (Albania and Hungary), Niyanta Thomas (Hungary) and Magda Toth Nagy (Croatia and Slovenia). Appendix 1 provides the list of interviewed experts. Appendix 2 contains the list of questions used during the interviews.

The Annex has been compiled in order to provide the source information to those interested readers of the Regional Report. Based on the information collected in the interviews, Draft Country Reports were prepared for each country and then sent to the interviewed experts for review and comment. From February to May of 1994 the Country Reports and subsequent Annex were revised, updated and clarified as comments were received from the interviewed experts. The final Country Reports are available as Volume II of the Strategic Environmental Issues project. The Annex summarizes the information found in the Country Reports and presents it in such a way as to allow easy comparison between the countries.

The information presented in this Annex exclusively contains the opinions of the interviewees. No additional sources of information have been used. We would like to stress that the information presented does not necessarily represent an official view, or the view of all persons interviewed. It also does not necessarily represent the opinion of the Regional Environmental Center.
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LIST OF ABBREVIATIONS

EBRD European Bank for Reconstruction and Development
EC European Community
EU European Union
EIA Environmental Impact Assessment
FOEI Friends of the Earth International
GNP Gross National Product
MoE Ministry of Environment
NGO Non-governmental Organization
OECD Organization for Economic Cooperation and Development
PHARE Poland-Hungary Assistance for the Reconstruction of the Economy
PPP Polluter Pays Principle
REC Regional Environmental Center for Central and Eastern Europe
US AID United States Agency for International Development
USD United States Dollars
US EPA United States Environmental Protection Agency
1. Political, Economic and Social Impacts on Environmental Protection at the Spring of 1994

1.1. Political Changes

**ALBANIA**

Due to the very authoritative control of the former communist government a dissident movement never really developed in Albania. Protests against the government did not begin until the end of 1990. In the early days of the political transformation process, the environment was a relatively important political issue. The environmental problems in Albania were the most visible negative effects of the totalitarian system and the uttering of environmental protest was seen as an expression of anti-communist ideas. Environmental NGOs were established soon after the collapse of the communist system, and the Association for the Preservation and Protection of the Natural Environment of Albania became the most important voice for the environment outside the government.

In the following years the importance of the environment as a political issue decreased. Although two years ago the Committee for Environmental Protection was established within the Ministry of Health, the political importance of environmental problems is now rather low. This Committee has little real authority. In fact, it consists of only 11 experts and does not have independent status. The status of the Green Party in Albania is illustrative as well. It has no political rights. The status of the Green Party in the Parliament and thus important new policies are not passed. Additional revisions in certain environmental policies and laws are required, and harmonization with EC standards has already successfully started in the fields of environmental assessment and human health.

**BULGARIA**

Concern for the environment was a driving force for the initial political changes in the country, though the environmental effects of these changes have not been dramatic. Previously, environmental laws and policies existed but they were unrealistic or just not enforced. As one expert reported, "controversial environmental policies were subjected to ideological and/or industrial values." Additionally, while annual reports on the state of the environment have been published, reports have not been discussed by the Council of Ministers and submitted to the Parliament for three years, as required by law. With the changes of recent years some progress has been made in the actual implementation of policies. Also, social groups such as environmental NGOs were previously not allowed to exist or were silenced. Now such groups are active and attempt to influence decision-making. A new Environmental Protection Act was adopted in 1991 and amended in 1992. A National Environmental Strategy was developed in 1990-91 in cooperation with the World Bank, with implementation having begun in 1992. Indeed, one positive result of the political changes has been the possibility for international cooperation with western institutions.

The ongoing transition has not been easy and in some ways the government has been overwhelmed by the changes, finding it very difficult to adapt to new demands and circumstances, according to one expert. The government has had to change its way of thinking and acting. It is necessary now to more clearly identify goals and priorities and coordination among the various State institutions must be improved. It was also mentioned that the current government is not strongly supported by the Parliament and thus important new policies are not passed. Additional revisions in certain environmental policies and laws are required, and harmonization with EC standards has already successfully started in the fields of environmental assessment and human health.

**CROATIA**

After the 1990 elections the transition to a market-based democracy began. The birth and development of the new state was the major issue. The legal and institutional infrastructures, as well as ownership patterns are being transformed. The greatest changes have resulted from the war which has severe repercussions. The war has resulted in the inaccessibility of international funding, limiting the possibilities of outside financial resources for environmental improvement. The primary goals of economic development, reconstruction, normal living conditions and returning refugees are pushing environmental concerns low on the list of priorities.

Croatia inherited relatively good environmental laws. Sectoral laws and regulations, including an Environmental Assessment Act, have existed since 1984. New environmental laws and amendments are being drafted. The Environmental Protection Act is being reviewed by the government bodies and Parliament.

Environmental issues are under the authority of several Ministries according to sectors. The Ministry of Civil Engineering and Environmental Protection plays a coordinating role. Nevertheless, a strong separate MoE is needed. Due to other priorities, incomplete legislation, inadequate institutional framework and lack of funding, it has not been possible to develop and implement a proper environmental strategy. Improvements are needed in institutional capacity to take advantage of existing expertise. Because of other concerns, the Parliament is not able to play a strong controlling role and the Parliamentary committee on environment is relatively weak. Response to existing negative trends has been insufficient. Expertise is available on a relatively high level but it is missing in some specific fields. Only a few experts and NGOs are involved in decision-making processes, but public awareness regarding environmental issues is increasing.

**CZECH REPUBLIC**

In 1990, new independent environmental institutions on the national level were created: the Czech Ministry of the Environment and the Federal Committee of the Environment. The Federal Committee does not exist anymore due to the split of the Czech and Slovak Federation in 1993.

From 1990-92 many influential positions in the administration and Parliament were held by environmentally aware people. It was noted that the present Government, in power since 1992, is "less green" than the previous one and the economy is its primary concern. The economic lobby has become strong now, as well.

Since 1990 modern legislation, such as the General Environmental Protection Act, the Environmental Fund Act, the Air Protection Act, the Waste Management Act, the Nature Protection Act and the Environmental Impact Assessment Act have been passed. Some of the new strict laws have created conflicts of interest among the Ministries, and thus, amendments are necessary.

In 1992, authority for landuse planning was given to the Ministry of Economy. This authority has previously been with the MoE since its establishment in 1990. Now some experts think that environmental concerns are a lower priority in this area.

Since 1989, the access to environmental information has been improved and comprehensive statistical data are being published.
Environmentalists started to organize themselves around the controversial Gabčíkovo -Nagymaros Dam project in the early 1980s. Aided by an indecisive communist party, environmental NGOs emerged by the end of the decade as the first opposition organizations tolerated by the communist government. As the environment became the only issue where dissident opinions could be voiced without considerable risk, all opposition gathered under its banner. As a result, in the campaign preceding the first free elections, the environment featured high on the agenda of the parties. In 1990 the new government reorganized the environmental administration. The Environment was divided from Water Management and coupled with Regional Planning. Environmental protection responsibilities are in the domain of the Ministry for Environment and Regional Policy. At the same time, management and service duties for the same environmental media (water, soil, air) are with other departments. These are the Ministry for Transport, Communication and Water Management, the Ministry for Agriculture, The Ministry for Health and Welfare and the Ministry for Industry and Trade. Important responsibilities were also devolved to the municipal level. Newly elected local authorities are now responsible for the environment on a scale not experienced before. Addressing these issues is all but impossible due to the present lack of environmental management professionals.

Hungary’s becoming an associate member of the EU triggered the translation and adaptation of the EU’s environmental directives. The solution of existing environmental problems, however, benefitted little from the improved European relations. The controversial issue of the diversion of the Danube into Slovakia was not solved by EU mediation. The second free elections took place in May 1994. Most of the parties had environmental policies, but the campaign clearly focused on economic growth and unemployment. The environment has fallen off the political agenda.

Poland

A civil society is developing and where the State Government was once solely responsible for decision-making, now local governments, industrial and trade lobbies, NGOs and citizens are demanding that their interests be accommodated in new policies and laws. These changes affect the environment in many ways, for better and worse. Many of the experts discussed how Poland’s environment suffers because of the ambitious exploits of politicians. Indeed, in the face of various economic and social pressures the environment is virtually off the political agenda and the MoE is recognized as one of the weakest Ministries in the Government. The situation is worsened by poor cooperation and coordination among the various State Ministries. Furthermore, with frequent changes in the ruling government coalitions, Poland has had four different Ministers of Environment in the last three years, making consistency in policy and leadership very difficult.

Fyrmacedonia

Democratization has generally had positive effects on environmental protection in the FYR Macedonia. One expert noted that environmentalism really only began with the political reforms. The new freedoms have allowed the public to speak out about environmental deterioration, and now citizens and NGOs publicize the issues and react strongly to problems. Environmental interests are now promoted in decision-making within both the Government and the Parliament. Some elected officials have even embraced environmental issues in their platforms. (Some experts noted, though, that the pro-environment positions announced by politicians are often merely hollow attempts to win electoral support).

Most of the experts agreed, however, that the negative impacts of other political changes, namely the political conflicts with Greece and the fallout from the war in Yugoslavia, have been more significant than the benefits enjoyed from democratization. (A few experts even mentioned that democratization has had some adverse effects as chaos and anarchy have appeared in the absence of the previous political system.) Certain environmental problems cannot be solved and continue to worsen without close cooperation with Greece (and Albania as well, which has its own serious economic problems). The economic crisis resulting from the trade embargoes with Greece and Yugoslavia dominates public and political concern and environmental issues are considered a low priority. This has contributed to a lack of progress being made in enacting and formulating greatly needed new environmental laws and policy. Progress in the areas of law and policy has also been hindered by the lack of a separate MoE.

Romania

With the move towards democracy people now have greater freedom to express their concerns about environmental problems and to demand government action toward solving them. Citizens now have the right to organize themselves and environmental NGOs have been established. Some pro-ecological political parties were also formed, and won some seats in Parliament during the 1990 elections. (One expert stated, however, that these “green” parties failed to win widespread support because they did not adequately include other important social issues in their programs.) Another positive effect has been that environmental protection has become institutionalized with the establishment of the MoE (in late 1989) and other environmental institutions. Other benefits arise from international cooperation and the exchange of information and experience.

Unfortunately, the political changes have had serious negative effects on the environment as well. With the collapse of the previous political system instability and uncertainty have emerged. Frequent elections and new governments in the past few years have resulted in continuous turnovers in key decision-making positions and a lack of consistent policy. Existing old laws are not adequate for the new circumstances, but sorely needed new laws have not been enacted. For example, the lack of proper land-use planning laws has encouraged the chaotic development of all sorts of residential and commercial buildings, putting a blight on the landscape, and damaging natural areas. A growing disrespect for the rule of law in general has led to various abuses of natural resources, with increased wildlife and fisheries poaching and illegal tree cutting being mentioned by a few of the experts. In such conditions the regulatory offices have little real power to enforce the laws. Political power struggles also hinder the passing of needed laws as the politicians are often more concerned about elections that in public policy.
In 1990, an independent environmental administration was established. The Slovak Commission for the Environment was established as an over-sectoral body, above the level of Ministry. In 1992 it was renamed the Ministry of Environment and set at the same level as other Ministries.

Unlike the Czech Republic, Slovakia established independent regional environmental authorities. There are plans to integrate them into the State administration. While State officials consider this "horizontal integration," where the heads of the regional authorities are representatives of the State Government, environmentalists criticize the plan as a tendency towards centralization and reducing the power and independence of the regional offices.

Between 1990-92, almost the whole system of environmental law was renewed. After the split, Slovakia adopted all the new environmental acts from the Federation. As the creation of the new regulative system occurred in a very short time, new amendments are necessary.

From 1990-92, the environmental lobby had more political influence than now. The Minister of Environment was Vice-Prime Minister for the first six months after the revolution. The Green Party had six deputies in the Slovak Parliament from 1990-92. After the elections in 1992, the Green Party was no longer represented in Parliament.

There are now fewer people in Parliament and Government with experience in environmental protection issues. Ongoing conflicts in Parliament over a variety of contentious issues further complicate the political process. For instance, since 1992, no major new environmental law has been passed by the Slovak Parliament (EIA, water act, nature protection act, and the risk assessment act remain to be adopted).

Experts noted that after the split of the Federation in January 1993 environmental concerns moved down the priority list to a greater degree than in the Czech Republic because of political and economic reasons.

The change to democracy has brought mostly benefits for the environment. NGOs have entered the political arena and pro-environment political parties were created. A Green Party was established and entered the first governing coalition with four ministers. There was a chance to put environmental issues on the political agenda but little was done to improve the environmental situation in reality. Environmental issues were pushed to the background during the transition by problems related to creating a national identity. Since the 1992 elections, when the Green Party lost its seats, there is no political party interested directly in the environment. The economic and social problems (economic restructuring and recession, unemployment, privatization, lost markets) have priority over the environmental problems according to both the government and the public. There is no national development strategy, and the existing policies are dominated by monetary and economic considerations.

One of the most crucial steps in the environmental field was the adoption of the new environmental framework law. The government is still working on the sectoral laws and also plans to strengthen the ministry to enable it to implement the law. Some see this legislative achievement as the only positive result of the past three years. On the national level several environmental problems remain unsolved (Krsko nuclear power plant, disposal of nuclear waste, Triglav national park), because the decision-making system is overloaded. Public participation is not functioning in a new and efficient way. The decision-making system is not open to experts and NGO's and they have little influence. There is no real center of power and decision-making in the MoE now, though it was able to elaborate a new environmental concept together with experts and NGOs. The green movement has regained its dynamic character. In the previous period, the movement was divided over the issue of using only political channels for expressing disapproval.
1.2. Economic Changes

**ALBANIA**

Inflation was very high early in the transition period (50% monthly). By the end of 1993 it had stabilized at 3% to 6% per month. The climate for foreign investments is just now becoming favorable. Foreign investors are attracted by the Government to develop tourism. The Government recently presented a Masterplan on Tourism and created a Ministry of Tourism. Tourism is expected to provide half of the country's income within a few years, but may pose some threat to the environment if not regulated.

Most of the enterprises in the chemical, metallurgical and mechanical sectors have been closed due to outdated technologies and inefficient production systems. These enterprises left legacies of past pollution and their closing has had disastrous effects on the economy and employment. On the other hand, air, water and soil pollution from industry has decreased markedly. The enterprises remaining open are still mostly state-owned (e.g., metallurgical, petrochemical and salt industries), and are facing severe financial difficulties. Thus, it is not surprising that they are not interested in investing in the environment. In the early stages of democratization no environmental law existed and there was no control on the formation of new companies. Thus, many illegal economic activities began at that time.

Privatization in the agricultural sector has redistributed about 70% of state-owned land. To increase the workable surface area, terraces are being cut into the mountainsides, with disastrous soil erosion resulting. The use of pesticides and fertilizers, however, has decreased recently because they are too costly for private landowners, and farmers are inexperienced in using them.

Open borders have led to the import of Western goods, with cars being a prominent example. Under the former system, cars were rare. Now old cars, usually ones written off by owners in Western Europe, are considered trophies, and air quality in cities is decreasing rapidly.

**BULGARIA**

Under the previous economic system, the environment was adversely affected by the focus of the economy on heavy industry. With the orientation towards world market prices for raw materials, industrial efficiency has become a major driving factor for industry. Many industries have simply not been able to survive and economic production has decreased dramatically (about 35%), resulting in a visible reduction of pollution. This economic decline has, unfortunately, diminished the funds available for environmental investments as much of these funds come from fines and penalties on industry for environmental damages.

Moreover, the sudden changes have created a chaotic situation in which it has become very difficult to clearly identify needs and priorities. Some market reforms, such as privatization, have progressed only very slowly and have not yet had a major effect on environmental protection. While some experts believed that this has had negative effects, for example there still exist many large State enterprises which are virtual monopolies, and thus in a position to avoid the full effects of environmental regulation, the slow progress has allowed time for the development of needed related rules and mechanisms regarding the environment. Indeed, in 1992 the Parliament adopted an amendment to the law of privatization which guarantees revenue for environmental protection amounting up to 5% of the privatization transaction.

**CROATIA**

In Croatia the transition to a market economy has been somewhat different compared to other countries in the region. During the past three years the war has been the major decisive factor influencing all the political, economic, and social changes in the country. The situation caused by the war has contributed to the economic crisis and has led to a fall in the living standard and quality of life. Due to the war conditions, industrial production has fallen to 50% of the 1990 level, but some improvement is expected. Industry and agriculture were severely damaged during the war and occupation, and experts are hoping that the overall development process will be more dynamic in the near future.

In the fall of 1993, economic reform and developmental questions (including to some extent the environment) have come to the forefront. More attention is being given to obtaining Western assistance, reducing inflation, and opening development options. So far, privatization has only gone through its first phase, which includes small and medium-sized enterprises. The new privatization law, adopted in 1991, does not include environmental interests. A proper banking system has not yet been established but some efforts to improve the situation are ongoing. It will be difficult to progress with the economic changes if vital outside support cannot be gained. Presently, mostly humanitarian assistance is being received (e.g., EC funds like PHARE, and US support are not available to Croatia). Since April 1994 Croatia has been accepted as a participant in the Global Environment Facility.

**CZECH REPUBLIC**

Between 1989 and 1993, the decline in the GDP was more than 20%, mostly due to the decline in industrial production, which contributes a major portion of the country's pollution. However, the level of environmental pollution did not diminish to the same extent as the industrial production because the most polluting industries did not reduce their production significantly. An expert mentioned that this is because the largest enterprises are protected by the government due to social concerns and also these enterprises often earn some foreign currency. Therefore, as some experts mentioned, even the existing laws are not applied strictly to them.

Privatization is not expected to have a negative impact on the environment, as there are regulations in place to prevent this: Environmental audits or EIAs ensure that the measures to achieve compliance with the environmental laws are identified (these regulations are only for the second wave of privatization). At present, it is difficult to judge the impact of privatization and the success of these provisions because the second wave of privatization has not yet advanced much. In relation to financing the cleanup of past pollution, the responsibilities are unclear in practice; at present the rule is that the responsibility is with the new owner.

**HUNGARY**

From 1990 to 1994 efforts were focused on restructuring the economy. The sectoral structure of industry was the result of a voluntary development in neglect of the industrial traditions and geophysical realities of the country. Over 21 billion USD in foreign debt and the collapse of eastern markets made things worse. Once on the market, most outdated enterprises quickly went bankrupt. Industrial output has fallen by 30% in the past four years, with signs of recovery during 1993. The decline of agricultural production followed with some delay. This decline in production meant decreasing pollution, too. Main improvements were in air quality and industrial waste generation. In the agricultural sector, higher prices caused a decrease in the use of agrochemicals. During the past four years industrial production costs have doubled, and purchase prices in.
agriculture went up by 70%. The high inflation rate makes loans expensive, further discouraging investments in environmental protection. The privatization process was a missed opportunity from an environmental point of view. Regulations on bankruptcies and take-overs do not contain environmental safeguards, such as independent audits and subsequent duty of the owner for cleanup. Such measures are sometimes voluntarily carried out. At the same time, by promoting efficiency with energy and raw materials, privatization is expected to have some favorable results as well. Due to both the lack of loans and capital on the one hand and the lack of enforcement on the other, some small enterprises are importing obsolete Western technologies, and wastes for disposal. New companies dealing with environmental technologies and consulting firms have also emerged. However, there are no institutional safeguards as yet to exclude enterprises with low professional standards.

Economic changes occurring in the FYR Macedonia in recent years have had major impacts on the environment, almost entirely for the worse. Nearly all of the interviewed experts explained that benefits expected to be gained from free market reforms have been overwhelmed by hardships resulting from political tensions with Greece and the war in Yugoslavia. Due to economic embargoes, markets have been lost in both of these countries, which represent two of the four neighbors of the FYR Macedonia. Management and pollution abatement equipment, critically needed by many factories, cannot be imported from these countries. A third neighbor, Albania, has dire economic problems of its own, leaving Bulgaria as the only bordering country with which to have normal trade relations. (And even here there are occasional squabbles.) The resulting sharp economic decline and weak economy have increased stress on the environment as short-term economic priorities now dominate decision-making in all sectors. Industry claims that it barely has enough money to pay salaries and that investments in environmental protection are simply not possible. The government says that it is doing all it can but that it too is severely hampered by the lack of financial resources. Members of the general public are experiencing increased threats to their economic welfare and thus the environment is seen as a luxury item. In such circumstances environmental protection is a very low priority.

The profound economic changes of the past few years in Poland have had major impacts on environmental protection in the country. Market reforms have included the removal of price controls for raw materials, the elimination of State subsidies to producers, privatization of industries, international competition and foreign investment. The basic result, as noted by several of the experts, has been that "many of the most inefficient producers, which were also usually the worst polluters, have been shut-down." Producers now have to be more conscious of environmental issues from the very first stages of the production cycle. With the lifting of price controls manufacturers must pay much more for their raw materials. The combined effect of competition and the elimination of State subsidies has caused producers to use resources much more efficiently in attempts to become profitable. Foreign investment has added to competition as well as made available technologies and new roles for environmental protection. Privatization has largely separated the State from the production sector, enabling it to more effectively regulate manufacturers and their environmental impacts. With the government in this new role, it is now able to effectively use various environmental instruments, such as pollution fees and fines, which compel producers to make investments in environmental protection, as well as generate funds for the governments to make environmental improvements themselves.

The experts noted that market reforms have also had some negative effects on environmental protection. With increased competition and higher production costs, there are strong incentives for producers to cut costs wherever possible. In some cases this results in manufacturers foregoing the expenses of environmental protection and externalizing such costs onto society. There is also concern that with the pressure to privatize State enterprises environmental concerns are ignored or inadequately dealt with by the responsible State authorities. Also with privatization, forest areas previously under State protection are now vulnerable to being mismanaged due to closing markets (Russia and the former Yugoslavia) and non-competitiveness of some Romanian industries. The dire state of the economy has created a situation of chaos. There is little to no monitoring or regulation of industrial activities and the pressure to produce as cheaply as possible is strong. In such circumstances the environment is often abused. The grave financial situation has also resulted in a much lower budget for environmental protection expenditures. One expert reported that currently less than 0.5% of GNP is devoted to environmental protection, thus pollution abatement equipment goes unrepaired and needed new technology is not purchased. At the same time, with the national borders being opened for trade, the number of second-hand automobiles in use has risen, adding to air pollution problems, and the amount of solid waste has increased.

Economic changes have had major impacts on environmental protection, and indeed society as a whole. Like the situations in other CEE countries, the market reforms in Romania brought significant reductions in heavy industrial output and thus a reduction in air and water pollution from this sector was generally experienced. International trade was also noted by one expert as having the positive effect of spurring the development of environmentally friendly, technologies available now in Romania. Privatization has also had impacts. It was noted that property ownership is a new role, it is now able to effectively regulate manufacturers and their environmental impacts. With the government in this new role, it is now able to effectively use various environmental instruments, such as pollution fees and fines, which compel producers to make investments in environmental protection, as well as generate funds for the governments to make environmental improvements themselves.

The restructuring of the economy has resulted in a reduction of the volume of industrial production to about 50-60% of the 1989 level. Most branches of industry have been affected, except for metallurgy and other secondary production industries. Energy production did not decrease.
Most companies are in debt, with the exception of energy producers. Partially because of the decline in industrial production, the emissions of pollution have diminished. For instance, the national SO\textsubscript{2} emissions decreased by about 40% between 1989 and 1992. Some major polluting sources have been partly or totally closed. Social concerns and powerful industrial lobbies play a major role in not taking such steps.

Restructuring agriculture means that 80% of the land will be privatized, which will result in a change in the structure and practices of agricultural production. Experience so far has shown that the new owners are mostly concerned with short-term profits, often regardless of environmental concerns. Pesticide and fertilizer use has decreased largely because of the high costs.

The concept of restructuring the economy was elaborated in the former Federation. The Slovak Republic, after gaining independence, did not change the concept in essence. However, in practice there are differences, for instance the privatization process has slowed down considerably. Privatization has not yet had a strong impact on the environment in Slovakia. Though, experts mentioned that once it is known that a factory is going to be privatized, often the current owner (the State) is no longer concerned with its environmental statutes, resulting in the neglect of its environmental responsibilities. The 1992 law concerning the second wave of privatization (includes the privatization of the biggest point sources of industrial pollution) mandates that an environmental audit has to be conducted for each of the privatization units. However, the information required by the audit has disputable and relative value. It serves, first of all, the purchaser of a firm, and to regulate the price. There are no regulations that address the time in which a clean-up has to be completed.

### SLOVENIA

The previous structure of production, which was characterized by an emphasis on energy intensive heavy industry, has changed to a great extent. The current economic program includes rehabilitation and restructuring. There is still a decrease in industrial production. In 1991 the growth of GNP was 9.0\%, in 1992 7.2\%, and in 1993 was between -1.0 and 1.0\%. Successful restructuring of industry has started, proven by the 35,000 new jobs that have been created in new factories. Pollution is decreasing because of depressed output from heavy industry. Energy prices are under government control and they are kept low. The first priority of the economic policy is to reduce inflation. Tax reform is going on, and in 1994 a Value Added Tax will be introduced. The restructuring process results also in serious social problems. At present, there are 100,000 unemployed and the social tensions are resulting in strong political pressure which might have impact on the current economic trends.

Privatization will release some funds for the economy and also for the environment. The small and medium size enterprises (between 500-2000 employees) are being privatized. There is a program of mass privatization as well, and each citizen can buy shares. Managers and workers also can buy out shares of their enterprise. Privatization of the banks will be started after a rehabilitation program is completed. Funds provided by privatization are put into a Development Fund. The Agency for Privatization is the authority to approve the schemes of privatization.

Funding for the environment is limited. The implementation of some of the most important environmental projects (like the desulphurization of the Sostenj power plant) was stopped due to lack of money. The government is trying to seek funds from abroad within the framework of the Slovenia Environmental Project.
1.3. Social Changes

**ALBANIA**

The first few years of the transformation towards democracy can best be described as anarchy. The new freedoms sometimes led to serious environmental damages. An example is the uncontrolled cutting of trees for fuel. Estimates are that 80-90% of the households are dependent on wood for heating. Albania has been struggling for decades with the problem of providing sufficient heating for dwellings. The recent reduction in energy supply caused the short term issue become even more severe. In the last 45 years 30% of the forest area has been destroyed by clear-cutting. In addition, hunting and fishing, as well as the sale of medicinal plant species, have become popular ways of earning hard currency. Rare bird species and fish have been exported and sold for relatively high prices. The hunting practices themselves often have serious consequences. For example, explosives are sometimes used for fishing and are damaging habitats. Although laws on hunting and fishing were established in the 1970’s, no means for enforcing these laws exist.

Unemployment in Albania is extremely high. The personal problems of the people with regard to their basic needs dominate. As many people in Albania are homeless, unemployed, and live under the poverty level, it is understandable that the environment is not an easy priority issue among the population. The environmental awareness of the public can be described as very low.

Unemployment in the countryside has resulted in a rapid growth of the cities. Tirana grew in a few years from 300,000 to 400,000 inhabitants. The new inhabitants, often people from the northern mountainous parts of Albania, settle mainly in the suburbs of the cities, where the infrastructure is not sufficient to support the increasing population. The rapid urbanization is significantly increasing the pollution in cities because adequate waste management is lacking and the water supply is poor.

**HUNGARY**

The population, largely brought up on egalitarian slogans, finds itself at a loss with polarizing incomes. Unemployment, never experienced by these generations, is currently at 12%. As a result, an increasing portion of society is in immediate danger of becoming economically and socially marginalized. These groups regard environmental protection as a luxury, if not an outright liability. Environmentalists are sometimes perceived as factory-closers, investment-blockers, or people whose action leads to the depreciation of real estate prices. At the same time, the above-average income group is increasing their environmentally harmful consumption of cars, fuel, energy and purchase of goods with non-recyclable packaging. While the pollution per car is decreasing, the total number of vehicles is increasing, leaving transport-related pollution at about the same level. While the perceived Western attitude to frequent health checks and physical exercise has been quickly adopted by these people, environmental awareness is not "fashionable" yet. A typical example is the failure of selective waste collection schemes in wealthy districts of Budapest due to non-compliance. A clearly positive development from the democratization of society is the emergence of environmental NGOs of which their number are well over 200. Some of those organized in the eighties are now near-consulting level organizations. International groups like WWF, Friends of the Earth etc. are also present, and new groups are constantly appearing. However, some argue that environmental NGOs are losing their constituencies. They are certainly not perceived anymore as spearheading social reform, and, when successful, actions are thought to be economically damaging. Public participation in environmental decision-

**CROATIA**

The democratic changes stimulated a new approach towards political, economic and social questions as well as environmental protection, but neither the government nor the citizens are active enough in the field of environmental protection.

Unfortunately, the economic crisis and the war have led to mass poverty. In addition, the huge flood of refugees has also become a priority requiring immediate attention. In this situation, much of the population is not in the position to give attention to environmental problems. Furthermore, the conditions necessary for the development of civil society are substantially lacking. As the economy is in a difficult situation, there is always the pressing question of how to bridge the gap between social and economic (industrial) interests. There is strong pressure on the politicians to secure reconstruction and the return of refugees before any issues are addressed.

**BULGARIA**

The political changes brought new social freedoms. Now people have the right to speak and to pressure the government to take certain actions. Public pressure has actually been successful in defeating some proposed environmentally harmful activities, such as the expansion of a dangerous metalworks plant. Environmental NGOs working on a professional level have had a positive impact on environmental protection. The MoE has even created a special office for NGO relations. (The experts had conflicting opinions on whether public awareness was declining or rising).

Other changes, especially economic, have created social pressures having negative effects on the environment. After the initial euphoria generated by the new freedoms of democracy, environmental issues have fallen far on people's agendas. People still express concern, but not enough to act. To some extent the environmental movement was used merely as a tool for advancing political reforms. Political activism of some NGOs diminished their public standing. Once the political reforms came, interest in the environmental fell and people found other priorities. The romantic period of change was brief and people are now faced with the reality that the transition period will include great difficulties. Because of the collapse of the previous economic system many people, and the government as well, have financial crises. Job security is now a priority issue with unemployment about 16% and rising. In such an atmosphere the environment is just not a priority.

**CZECH REPUBLIC**

Shortly after the revolution, environmental protection was considered the second most important issue for the country (after preventing the return of the totalitarian socialist system). Four years later environmental protection is considered much less important by the public. This changing attitude could already be observed in 1991. This occurred partly because environmental activism was partially tolerated in the former system and so the environment was partly just a carrier for "half legal" protest.

A significant portion of the public, like the government, is now concerned with the pressing economic situation and private business development. They are primarily concerned with new possibilities and challenges, but also new threats facing the country. However, the social situation is basically stabilized (strikes are rare). As an expert stated, the society is rather sensitive to impoverishment and measures to fight that exist.
The considerable social changes which have taken place in Poland over the past few years are closely related to the economic and political changes mentioned previously, and like them, are having both positive and negative effects on the environment. With market reforms driving the closure of many large industrial facilities, unemployment has increased dramatically. According to all of the expert participants, it is now one of, if not the, dominant issues on the social, economic and political agendas. As a result, other important issues, such as the environment, are receiving little serious attention. The overriding concern of many citizens and decision-makers alike is now "economic growth at all costs". Naturally, this has many effects. Citizens, while expressing concern about the environment, say that they simply cannot afford to sacrifice money or time on behalf of its protection. Citizens' financial difficulties have been worsened by high inflation which has helped create a situation where prices for many goods are approaching Western levels, while salaries remain low at Eastern levels. In such an atmosphere the pro-environment lobby is having difficulty convincing decision-makers and the general public that the health of the environment and the health of the economy are inextricably linked. It is true that with the advent of democracy the pro-environmental activities of NGOs and local governments have increased substantially. These groups, as well as private citizens, are taking advantage of the new freedoms and opportunities to express their concerns and to participate in policy-making. The pro-environment lobby remains, however, relatively weak in comparison to other interest groups such as labor unions and the trade and industrial lobbies. This situation could be improved, though, through better cooperation within the environmental protection sector. Many opportunities exist for NGOs and governments to cooperate, and they should do so to promote the importance of environmental protection within the policy-making arena and society generally.

SLOVAK REPUBLIC

With the opening of the "iron curtain" the society was opened, too. Information about the state of the environment has been prepared and published, and environmental experts and organizations have been allowed to influence the decision-making process. In addition, international organizations have offered assistance and were welcomed. However, the environmental advocates stressed that at present the amount and access to information is still insufficient and public participation is limited, and the situation was better before the 1992 elections.

The transition period has resulted in serious social problems. The unemployment rate grew to 15% in February 1994, and also there are direct economic threats for segments of the society, not experienced before. Because of this and also growing interest in exercising new, "more attractive" freedoms and choices, awareness and interest regarding environmental problems has decreased. Just after the revolution environmental concerns were a high priority of the public, partially because before, addressing environmental problems was one of the possibilities to criticise the communist government.
Democratic changes have brought the plurality of different views. Some political parties include persons with environmental ideologies, but they do not have environmental experts. At the same time, environmental specialists have no access to political channels outside the party framework. This caused a crisis in the green movement and many NGOs left because they did not agree with using environmental issues for political purposes. Environmental issues are returning to the political agenda due to the activities of new NGOs, such as the Slovenian E-Forum (Environment, Economy and Energy) which brings together experts of different institutes and universities. There are other NGOs which have been operating for some time based more on moral values than on expert knowledge. They are organized in local groups, dealing with local problems, and through cooperation they are able to have an impact on the national level. NGOs can act between the state and local level in cooperation with the media through publishing articles and studies and increasing environmental consciousness. NGOs and the media act on two levels: trying to influence the public through awareness raising; and cooperating with the government structure. The relationship between the politicians and scientists depends on the political climate. The NGOs and experts are not involved enough in the discussion of environmental issues.

The environmental awareness of the public in Slovenia is relatively high. People accept that nature and environment have to be preserved. However, the decrease in the standard of living contributes to the lowering of environmental interest. A great number of NGOs are working quite efficiently, but the public is not open to solutions which involve a sacrifice on their behalf. This attitude is caused by earlier experiences when environmental issues were misused and manipulated. They have no real experience of successful environmental projects. Sometimes environmental issues are used by the local communities and parties as tools in political battles.
2. Assessment of Environmental Assets and Damages

**ALBANIA**

**NATURAL CAPITAL**

Albania’s nature can be described as unique and relatively untouched. Parts of the coastal zones were protected areas or military zones, so access to them was forbidden. The flora and fauna in those zones is very diverse, containing several rare species and medicinal plants. Glacial lakes in Northern Albania, forests from Mesozoic origin, and especially the lagoons in the coastal zones are of great natural value. Albania has great natural reserves of oil, gas, coal, copper, iron, and nickel and is one of the world’s largest producers of chromium. The coastal nature areas have significant potential for the development of tourism.

**ENVIRONMENTAL DAMAGES**

The lack of modern solid waste management systems has resulted in a growing municipal waste problem. No sewage treatment plants exist, seriously endangering drinking water. Deforestation and soil erosion are also serious problems. Several hot spots were mentioned: in the town of Lac, the health situation became so bad that people are being evacuated (copper smelter). Evacuation also took place in Vlore (PCV factory). The copper mining and treatment industries are explicitly identified as environmental threats. The petroleum industry in Albania causes severe environmental problems. The heating plants that run on petroleum and also on coal are mostly situated close to urban areas, e.g., near Kukes and Tirana.

**BULGARIA**

**NATURAL CAPITAL**

The natural environment in Bulgaria is perhaps not damaged to the same extent as some other CEE countries. Unique Bulgarian forests, mountain areas like East Rodopy, Rila and Pirin, and the Black Sea coast provide a number of attractive tourism areas. There are many well preserved areas with exceptional biodiversity, and about 60% of the various European species can be found here, including some rare specimens. Instruments for environmental protection such as environmental impact assessments and environmental audits are being used more commonly and these may also be considered assets.

**ENVIRONMENTAL DAMAGES**

Several extreme soil pollution from heavy metals produced by metalworking facilities has rendered lands unsuitable for agriculture. Certain stretches of rivers are considered extremely polluted and the water here is not fit to use even for irrigation. Mining activities resulted in serious air and water pollution. One expert reported that in some mines levels of radioactivity are higher than in the nuclear power plant. Exposure to lead from automobile exhaust is a growing threat, especially affecting children. Several hotspots posing severe environmental risks have been identified including the Plodviv, Pirdop, Vratsa, Ruse, Montana and Kurdzhaly regions (non-ferrous metalworks have polluted air, soil and water with lead, arsenic, cadmium, etc.); the Varna-Devnya region (polluted by a giant chemical factory); and the Burgas region (contaminated by a petroleum plant).

**CROATIA**

**NATURAL CAPITAL**

Croatia has very rich natural capital preserved at a high level. There are seven National Parks and six Nature Parks, some of them famous for rare habitats, with 900 species and plants protected. Some of these areas are now under occupation and are incurring damages (e.g., Plitvice, Krka, Kopacki Rit, Lonjsko Polje). The country’s assets include the scenic coastal area and potential for tourism, the fertile agricultural area Slavonia, and the drinking water resources in the Karst area. There are efforts to protect wetlands and natural rivers, e.g., Lonsko Polje, a 60,000 ha wetland, the most important bird sanctuary in Europe. The Adriatic Sea along Croatia’s coast is cleaner than along Italy’s but vulnerable because of its shallowness.

**ENVIRONMENTAL DAMAGES**

The most serious damages have been caused by the war in the protected areas under occupation. The areas directly affected by the war include Plitvice lakes, Kopacki rit, Lonjsko Polje, and Krka National Park. Waste materials in war zones and damages due to the bombing of chemical industrial complexes (Osijek, Vinkovci, Vukovar, Sisak, Pakrac, Lipik, Slavonski Brod, Nova Gradiska) are resulting in pollution of groundwater, soil, and rivers. Large ly due to the lack of appropriate sanitary landfills, incomplete legislation and temporary military occupation of some disposal sites communication and toxic waste is causing serious environmental damages in some areas. The Sava river collects waters from many tributaries which are heavily polluted, especially those coming from Bosnia and supphng several millions of people, industry, and agricultural areas. Acid rain is endangering about half of the woods in Gorski Kotar.

**CZECH REPUBLIC**

**NATURAL CAPITAL**

The experts mentioned that about 40% of the land in the Czech Republic is protected area. There are three National Parks and 24 Protected Landscape Regions and numerous Nature Reserves. The Government is considering at present the addition of a new national park. Nature conservation has a long tradition in Czech Republic (the first forest law was promulgated in 1754 and the first nature reserves were declared in 1898).

**ENVIRONMENTAL DAMAGES**

The mining districts in Northern Bohemia have been devastating mainly due to air pollution (which is the primary source for health problems); to a smaller extent, the industrial areas of Northern Moravia (Black coal mining and steel production) and Prague (mainly air pollution from automobiles and industrial production, causing damage to a large portion of the population). The planned building of a nuclear power plant in Temelin is under controversial discussion. There is a strong lobby in the Government for the construction of the plant because it will benefit many industries. An expert mentioned that Temelin is for many people a reasonable way to improve the situation in Northern Bohemia, as any other way would stabilize old technologies on sites. Northern Bohemia is producing most of the energy for the country. The Clean Air Act lays down that by 1998 when Temelin starts, emissions must be substantially reduced.

**HUNGARY**

**NATURAL CAPITAL**

Albeit the population density in Hungary is 110 per square km, most people live concentrated in towns. Relatively undisturbed areas are ranked into national parks, protected landscapes, nature conservancy areas, totalling more than 5000 km², or 6% of the area of the country. Among these, the area around Lake Balaton has a special importance for the tourist industry as 20 million visitor-days are spent here every summer. The eutrophication process threatening the water quality started in the 1970s. By 1990, ambitious projects stopped the deterioration, but still couldn’t reverse the process. More than 70% of the country is fit to use even for irrigation and chemical factories were the worst...
polluters. Many hazardous waste deposition sites were discovered, only after health hazards were detected. Among the 300 military bases left behind by the Soviet Army many were heavily polluted by kerosene, oil and toxic heavy metals. Air pollution is comprised of industrial emissions from power plants (SOx) and the chemical industry; urban emissions from heating (low stack SOx) and transport. The pollution of subsurface aquifers is among the most serious problems in Hungary. Lack of canalization and sewage treatment as well as excessive chemical fertilization caused serious NO3 contamination of drinking waters. Quantitative problems are the dropping of the level of the water table in some karstic regions due to open-cast mining, and near the dam at Bos (Gabčíkovo). Waste: there are more than 2000 inadequate and/or illegal dumping sites containing both domestic and hazardous waste.

**FYR Macedonia**

NATURAL CAPITAL
Despite FYR Macedonia’s small size the country contains important valuable natural capital. The major lakes of Ohrid, Prespa and Dojran were mentioned by nearly all of the experts as extremely valuable and in great need of conservation. These lakes are home to many unique species and offer excellent opportunities for scientific research. Their great beauty provides the basis for a bustling tourism business. The value of Lake Ohrid has received special recognition, with the lake being listed by UNESCO as a site of World Heritage. The FYR Macedonia also has national parks which include many plant and animal species unique to Europe.

ENVIRONMENTAL DAMAGES
Water pollution from industrial and domestic sources causes more damage than can be calculated. Plants, fish, and terrestrial animals, including humans, all suffer from it. Each year large-scale fish-kills occur, and often water supplies are unusable for livestock due to industrial pollution. Some of the rivers are considered to be dead. The situation is exacerbated by already low and decreasing water reserves. Water pollution also negatively effects the state of the major lakes, which in turn has a detrimental effect on tourism.

Air pollution from industry, homes, and automobes was mentioned as a considerable health threat. Emissions of SO2 from coal burning power plants and heavy metals from metalworking facilities were cited as having especially dangerous impacts on human health. Automobile exhaust was also mentioned as a serious and growing problem, particularly in the city of Skopje. The city of Titov Veles was also mentioned as a hot spot because of the huge industrial facility located on its upwind edge.

**Poland**

NATURAL CAPITAL
The "Green Lungs* area, largely undeveloped and free from industry, contains numerous lakes, streams, forests and Poland’s healthiest environment. Other valuable natural assets which were mentioned include the wilderness areas of south-east Poland, the lakes region in the north-west, areas with clean soils capable of producing healthy foods, and the many national parks and other protected areas located throughout the country.

ENVIRONMENTAL DAMAGES
Threats to economic development include polluted surface waters, the dropping groundwater table, acid rain, accumulated toxic wastes and certain geographic regions or hot spots. Two geographic regions were identified as hot spots - Silesia (air, water and soil contamination from out-dated industry; low emissions from coal-burning furnaces; and water pollution and toxic wastes from mining) and the Black Triangle (devastation from acid rain caused by emissions from industrial sources in Poland and neighboring Germany and Czech Republic. Economic losses in this area have been extensive due to thousands of hectares of forest being killed and agricultural areas rendered unusable.).

Human health threats include: air emissions of NOx, SO2, and particulate matter from coal-burning furnace and local boilers; exposure to heavy metals; low quality drinking water; food contaminated by air and soil pollution and rapidly worsening exhaust fumes from automobiles. In city centers, emissions from low stacks, and the increasing use of automobiles are reducing the quality of life. Poor land-use planning leads to industrial facilities being located in the middle of residential areas. Noise pollution is another a serious issue in urban areas. There is also the effect of 'landscape pollution' in the form of huge, ugly housing blocks, which separate inhabitants from the earth.

**Romania**

NATURAL CAPITAL
Some areas of Romania have remained largely free from pollution and the country contains many areas of great natural value. Substantial forest areas exist, and the diversity of flora and fauna is considerable. Some areas of special natural value already have protected status, with 12 National Parks having been declared. The Danube Delta, Europe’s largest wetland, is another special area. In recognition of this, a Danube Delta Biosphere Reserve was established. Also the Little Island of Braila, the last part of the Danube floodplain in its natural state, has great value and should receive special protection. Traditional values and lifestyles, still common in rural areas, are also assets as they result in a kind of truly sustainable development which has occurred for centuries.

ENVIRONMENTAL DAMAGES
About 25% of all forests are damaged by acid rain caused largely by pollutants coming from power plants burning low-quality coal. The damages to forests are especially harmful because deforestation results in increased soil erosion and reduced air quality. Water pollution from household, industrial and agricultural sources is another threat, effecting fish breeding, irrigation, and drinking water supplies. 18% of surface waters are of such low quality that they are not even fit for industrial use and 4000 km of rivers are considered highly polluted.

A number of environmental hazard areas, or "hotspots," have also been identified, where the environmental problems are severely threatening human health. Cities such as Baia Mare, Copsa Mica, Zlatna, Onesti, and others suffer extreme contamination from nearby industrial facilities. Primary culprits include metal-working plants and fertilizer manufacturers. In all, more than 1.2 million people are directly effected by pollution in the country.

**Slovak Republic**

NATURAL CAPITAL
Slovakia is rich in natural beauties. National Parks and Protected Nature Areas are being adversely impacted by intensive tourism, forestry and local industries. One significant example of squandering natural capital is in the Danube Basin where the intensive cutting of natural forests is taking place. In this case, the economic value of the cut timber is of more interest to the loggers than the value of the standing forest ecosystem. The government is currently considering the Tatra National Park as a potential site for a future winter Olympics. This could have serious environmental consequences for the area. Environmental advocates contend that promoting ecotourism in these areas is a better alternative. There are ongoing activities to protect the biodiversity of Eastern Slovakian wetlands and Southwestern Slovakian fresh-water resources.

ENVIRONMENTAL DAMAGES
Experts mentioned pollution from (heavy) industries as prominent causes of serious environmental damages, such as chemical, petrochemical, metallurgical, steel mill, cement, paper
and cellulose, and Aluminium industries. The forests, water and soil are exploited for economic benefit, with little interest in sustainable use of these resources or awareness of the environmental impacts of development. The Government's general policy for building a "strong" Slovakia includes a high level of energy use. Two huge power plants are under construction (nuclear and hydro). Both power plants will raise serious environmental issues. Environmental advocates stress that utilizing efficient energy-saving technologies would be a better solution to the energy problem, however, this alternative would depend on western financial and technical assistance. Whilst the nuclear power issue is high on the agenda of NGO's, it does not feature highly in public discussion.

**SLOVENIA**

**NATURAL CAPITAL**

Slovenia is rich in valuable natural capital. Though officially it is not a priority to take care of environmental assets, national parks (Triglav and Crkvinica) receive special attention. New law is being prepared to protect rare species, to protect large areas, like national parks, and different natural phenomena like Crkvenica in the karst area which has a disappearing lake. A law has been developed to establish several protected areas, regional and national parks, as well as the landscape in the Karst region. There is only one national park now and there are suggestions to have such a status for seven of the most important regions of rich natural values. Some of the rivers are well preserved (Soca, Krka, Kolpa. The Alpine areas could be used for water supply. Wetlands are another natural value but there is a serious problem of protecting those in the vicinity of large towns like Koper and along the Mura river.

**ENVIRONMENTAL DAMAGES**

Acid deposition damaging the forests in the North East caused by pollution from thermal power plants in Sostenj, Trbovlje, and others, and by transport. Transboundary pollution at the coast in the Karst region coming from Italy. Surface water is polluted due to the lack of waste treatment facilities. Ground water pollution caused by agriculture and the dumping of hazardous waste (Drasko Pole, Ptuj, Celje) endanger drinking water reserves. Slovenia has no facilities for solid and hazardous waste deposits which are currently stored at the industrial sites and presenting a major hazard for the country.

Human health is endangered by environmental pollution in areas surrounding power plants (Sostenj and others). The most serious health hazard occurred a few years ago when the river Krupa was contaminated by Polychlorinated byphenols.
3. **Priority Environmental Problems**

### ALBANIA
- Deforestation: wood is being cut by the population for fuel and by foreign companies for, amongst other things, furniture and Christmas trees.
- Soil erosion: privatization in agriculture has led to the carving up land into smaller divisions. To enlarge the arable surface, terraces are being built into the hillsides. Together with deforestation it is a source of enormous soil erosion.
- Municipal waste: the amount is growing in the cities and no suitable systems for collection and disposal exist.
- Water pollution: drinking water supplies are seriously threatened by the complete lack of sewage treatment facilities.
- Nature protection: the Albanian people, as well as Albanian and foreign companies are exploiting nature for fishing, hunting, fuel wood, and export products. Tourism is a possible threat to coastal nature.

### BULGARIA
- Water pollution from industrial and domestic sources (wastewater treatment facilities do not exist or do not operate properly), and low groundwater supplies.
- Air pollution from heat and power generation based on the burning of low quality coal, as well as increasing automobile emissions.
- Soil pollution from metalworks (heavy metals) and pesticides.
- Radioactivity risk from mines and the unsafe nuclear power plant.
- Solid waste management (there is an influx of disposable packaging from the west and a complete lack of adequate disposal facilities).
- Transboundary air and water pollution from neighboring countries.
- Hotspots severely contaminated by industrial facilities.

### CROATIA
There is no clear picture about the state of the environment. The last official report dates back to 1987. Improving this situation is a priority. Obvious issues mentioned are as follows:
- Air pollution (transportation, energy production).
- Some underground water resources, especially in the Karst area, are polluted due to inadequate wastewater treatment plants.
- Drinking water quality.

### CZECH REPUBLIC
- Areas where human health is endangered, primarily industrial centers and big cities due to air pollution.
- Cleaning up Northern Bohemia.
- The energy issue must be addressed so that it is compatible with environmental objectives.
- Most of the experts preferred not to prioritize specific environmental problems along media lines but rather stressed the need for a methodological, comprehensive approach for the different media.
- Addressing the increasing production of waste and waste management (industrial and domestic origin).

### CZECH REPUBLIC
- Hotspots (industrial areas).
- Waste (management in most cities, disposal, and import).
- Hotspots (industrial areas).
- The growth of polluting industries (i.e. cement, incinerators, waste management) is lacking legislative regulation.

### HUNGARY
- Ground and surface waters polluted by the excessive use of fertilizers, hazardous waste, and improperly treated sewage.
- Air pollution from power plants, the chemical industry, low emissions and automobiles.
- Soil contamination at abandoned former Soviet military bases.
- Hotspots include the Sajo Valley, the Transdanubian industrial region and Budapest.

Problems having priority are related to danger to human health: urban air quality, drinking water, waste management (e.g. new disposal sites, incinerators), food safety.

### POLAND
- Air pollution: most important pollutants are NO₂ and SO₂ emitted by industry, automobiles and coal burning home furnaces. Transboundary pollutants from the Czech Republic and especially Germany are also major concerns.
- Water pollution: surface water is polluted by domestic, agricultural and industrial sources. Ground water level is dropping. Drinking water supply is threatened in several places.
- Accumulation of municipal and hazardous waste because of growing amount of disposable packaging and lack of sound waste management system. There is a growing need for recycling programs.
- Two important hot spots in Poland, the Silesia region and the Black Triangle region.

### ROMANIA
- Water pollution, primarily from industrial but also domestic sources.
- Nature protection and loss of biodiversity (restoration of ecologically damaged areas).
- Air pollution.
- Problems associated with solid and hazardous waste.
- Environmental hazard areas (14 “hotspots” have been identified as being severely effected).
- Economic and political instability was mentioned by several experts as being the primary cause of the environmental problems.

### SLOVAK REPUBLIC
- Air pollution (mainly from industry and transportation).
- Water pollution (industrial and municipal waste water treatment is lacking).
- Waste (abatement technology in incinerators; waste import).
- Problems related to planned construction of power plants (nuclear and hydro).
- Health impacts on the population.
- Health conditions of Slovak forests.

### FYR MACEDONIA
- Water problems were most often mentioned by the experts as priority issues. Surface waters are contaminated by domestic, agricultural and especially industrial pollution. Groundwater supplies are low and dropping due to the drought of recent years.
- Air quality was the next most mentioned problem. Emissions of SO₂ from power plants and homes burning low quality coal, and heavy metal emissions from metalworking facilities were cited as serious issues.
- Deforestation resulting from illegal cutting, the drought of recent years, and fires encouraged by these droughts, was another issue cited.
- Problems related to waste, both communal and industrial, were also mentioned as being priorities.
SLOVENIA

- Air pollution due to industrial activities, heating, traffic, and weather conditions (winter inversions).
- Hazardous, solid and nuclear waste problems due to lack of regulations and proper management.
- Transport: There is the danger that Slovenia is becoming a transit country due to restrictions on transit in Austria and Switzerland, and pressure from Italy. Planned highways are endangering protected zones and fertile agricultural areas.
- Energy policy, with selection of sources, needs to be established. Options include: natural gas, nuclear power, hydropower and other alternative energy sources, or zero growth of energy production with sanitation of power plants and energy efficiency programs.
4. Critical Steps to Start or Continue Environmental Improvements

4.1. Management and Administration

**ALBANIA**

In March 1992, the Committee of Environmental Protection was established within the Ministry of Health. Eleven experts are responsible for the development and implementation of the environmental policy for Albania. The Committee needs to be expanded and given more authority. This will be only possible if the Committee is made independent from the Ministry of Health. The Committee was also criticized for spending too much time on international relations and not enough time on domestic issues. The Parliament will probably approve the employment of 35 more experts that will act as Environmental Inspectors on the district level. Environmental impact assessments are very much needed and a law is being drafted at the current time. Money collected through environmental taxes and pollution fines should be earmarked for environmental purposes and not absorbed into the general State budget.

Improvements in the areas of environmental administration and management are definitely needed. Currently there is a lack of strong experience in decision-making and problem solving. Better coordination and collaboration between MoE and other ministries and institutions such as the Ministry of Education and the Privatisation Agency are greatly needed. To address this and other needs, an Interministerial Committee for the Elaboration of Priority Environmental Projects and Development was established in November 1993. This committee is regarded as a prototype for a future National Council for Sustainable Development. Similarly, the MoE signed seven Memoranda of Understanding for Integrated Environmental Policy with other ministries including the Ministries of Health and Industries. The management responsibilities and functions of the Ministry of Environment should be much more clearly defined. Regional and local environmental management plans and programs should be developed. Modern monitoring capacities, and methodologies like environmental impact assessments and environmental audits are also required. (In recent developments to address these issues, a new computerized national monitoring, data analysis and information system has been introduced; legislation requiring EIAs and a bill concerning audits is being drafted.) Public participation should be encouraged in the environmental management process and mechanisms established to ensure that this happens. One expert suggested that the National Environmental Fund may be more effective if separated from the MoE and the State budget. There was also a recommendation for establishing a bank to support environmental investments.

**BULGARIA**

There is no separate MoE; the environment is integrated with civil engineering and it is only a secondary priority. The need for a separate ministry is recognized, however. The new draft law envisions a new system including a MoE responsible for an overall environmental policy, coordination and cooperation with other ministries, as well as with expert institutions, NGOs and local governments. The MoE would be supported by a separate environmental protection agency serving as a focal point for discussing and drafting environmental laws, and providing expert support. The third element of the institutional structure would be the necessary governmental authorities, inspectorates, local organizations to secure the execution of the environmental policy. Cooperation between the Ministries responsible for areas related to environment is not sufficient.

Environmental responsibilities are not well defined at the local level. There is no clear picture about the state of the environment now. There is a lack of adequate know-how to identify, prepare, and manage projects, and expertise generally is insufficient. There are experts and institutions but most of them are not included sufficiently in the decision making process.

**Croatia**

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**Czech Republic**

The cooperation between the MoE and connected research and scientific institutions could be improved to ensure that their activities complement each other. Experts criticized that up to now a cooperative effort involving the whole government on environmental issues is largely lacking. Management capacities must be strengthened.

Administration staff, especially at the local level, can not be paid adequately, in comparison to private firms; often qualified experts are lacking.

**Hungary**

The environmental committee of the Parliament was on strained terms with the Ministry for the past four years. Reports on the activities of the MoE to the committee were qualified as unsatisfactory. The Ministry for Environment and Regional Policy is the successor of the Ministry for Environment and Water Management. In both set-ups the environment was forced to play second fiddle. The Ministry needs more environmental experts on its staff. (It is a telltale sign that the Department for Informatics has recently been dissolved.) The regional environmental inspectorates got a bad deal (in laboratory capacity, personnel, equipment, etc.) when separated from the water management directorates. They are struggling with scarce resources and are forced to take part-time contractual consulting work in their own areas of responsibility, creating an enforcer’s nightmare. Full budgetary support to these organizations should be restored immediately. As yet most local authorities lack independent environmental experts on their staff. In larger cities, environmental committees are formed within the authority. The members, however, usually have other committee duties besides the environment.

**FYR Macedonia**

Improvements in these areas are also strongly needed. There is no separate Ministry of Environment, and according to some of the experts within the current responsible Ministry the environment is a low priority. There are also no specialized research institutions for environmental protection. Cooperation with the other Ministries could and should be enhanced. There is an absence of an effective monitoring and inspection system for all environmental media. The duties and obligations of the local governments in environmental protection are undefined.
**POLAND**

A more integrated approach to environmental protection is needed. The sectoral approach should give way to a multi-disciplinary one which involves all segments of society in responsibility for environmental protection. This requires making environmental information more accessible to the public. Currently, responsibility for environmental management is shifting from the central government towards local and regional administrations. The roles and obligations of the various institutions and governments involved in environmental protection need to be clearly defined and unambiguous. This is especially important with regards to enforcement.

Existing cooperation within the State government is inadequate, especially between the Ministry of Environment and the Ministries of Agriculture and Industry. Some progress has been made, however, regarding the privatization process as an Inter-Ministerial Unit has been established to consider environmental concerns related to ownership transfers.

Skills and know-how at the government level have improved considerably with the help of foreign assistance and this process should continue.

**ROMANIA**

The Ministry of Environment was established in 1990 and later renamed the Ministry of Waters Forest and Environmental Protection. Also the network of Field Agencies for Environmental Protection was established as a monitoring and control institution. The MoE is organising an inter-ministerial commission to improve the management of environmental issues within the transformation process. Such a commission may help to improve coordination and cooperation between the ministries, especially between MoE and the Ministry of Industry. Proper environmental management in the industrial sector is seriously lacking. Industrial enterprises have departments of toxicology for worker protection but generally do not have special offices for environmental protection. The value of existing environmental expertise and information is not realized because it is not coordinated or centralized for easy access.

**SLOVAK REPUBLIC**

The structure of the environmental administration has been reorganized several times since 1990. There is also a high turnover in staff holding the higher positions. The same goes for other bodies which cooperate with the environmental administration (e.g., the directing staff of the Ministry of Privatization has been changed recently). Another issue is that 25 - 30% of the staff of environmental administration had to be dismissed due to a lack of money; the professional positions have been especially affected (about 60% left ).

In terms of cooperation of the MoE with other Ministries and bodies, there is a general lack of understanding of the interdependence of environmental concerns with other issues. The MoE is a young institution; its representatives have to define their new roles in the transformation process in some cases.

**SLOVENIA**

The structure of the environmental administration is being finalized based on the new environmental framework law. The MoE will be restructured and strengthened and will receive new responsibilities (e.g., nature protection, construction permitting). According to the new structure, a clear division of responsibilities will be defined between the different institutions dealing with the environment. (The division of responsibilities between the State and local authorities, however, remains unclear and cooperation between them needs much improvement.) The water authority has already been passed to the association of the municipal services. An environmental protection agency and environmental inspectorate will be established. The agency will deal with monitoring, planning, preparing rehabilitation programs, enforcement, environmental permitting, and EIAs as well as environmental management. The inspectorate will have a controlling and enforcing role. An environmental fund will be established, which will be operational by the beginning of 1994. Jurisdictional reform is under way, creating 42 regions and regulating other fields which will have an impact on the environmental sector.
4.2. Enforceable Environmental Policy and Law

**ALBANIA**

A National Environmental Strategy was developed in cooperation with the World Bank. It has not been accepted by the government yet, but a National Environmental Action Plan, devised by the MoE, was approved by the government. Implementation of the Environmental Action Plan is only possible with foreign funding. For certain activities, agreements have been reached with foreign donors, and EC PHARE money has already been received.

A General Law on Environmental Protection has recently been approved by Parliament. A law on hazardous waste has been drafted and a law on environmental impact assessments is in the early stages of preparation. Laws on hunting and on forestry were developed in cooperation with other ministries and a law on fishing will appear soon.

More detailed elaboration of the General Law is necessary. Also, expansion of the staff and authority for enforcement of the law is a strong priority.

**BULGARIA**

With a National Environmental Strategy being developed in 1990-91, in cooperation with the World Bank, US AID and US EPA, needs for improvements in policy are not as great as others. This Strategy was not officially adopted but is used by the MoE. The Strategy should be officially adopted by the Council of Ministers. Environmental policy is set mainly by the Minister of Environment and Vice-ministers. There is no separate office or department for policy. Improvements in priority setting amongst the different environmental media are needed. Improvements in environmental legislation are probably not the highest priority as an Environmental Protection Act was passed in 1991, and amended in 1992. Some additional amendments should be made, however. Amendments concerning water, waste management and protected areas have already been drafted and are waiting to be approved by the Council of Ministers and Parliament.

While environmental policy and law are not priority weaknesses, law enforcement certainly is. Enforcement is woefully insufficient due to: a lack of professional expertise and financial resources, and subjugation of environmental concerns to industrial and political goals.

**CROATIA**

There is no elaborated concept of a completely independent environmental policy at present due to the existing structure, environmental issues are only of secondary importance within the Ministry of Civil Engineering and Environmental Protection. The proper institutions for developing and enforcing such a policy are missing and the necessary legal framework is also incomplete. The primary goal of environmental advocates is to set up a separate, independent and strong MoE. Some steps have already been taken to prepare a comprehensive national environmental strategy. The declaration on the environment was adopted by the Parliament last year which could be a basis for elaborating a strategy.

Some legislative progress has been made: the draft of the environmental framework law has been prepared. Discussion has started in the Parliament and it will probably be adopted in 1994. This law will determine the general framework for all the specific laws and regulations in the field of environment. The new Law on nature protection was passed last year. NGOs and academic experts were invited to comment. The new framework law is considered to be a good start if adopted. ELAs are obligatory since 1990, relatively widely implemented and regulated by a specific regulation since 1984. The new framework law encompasses this in a broader concept and plans a new regulation on it. Proper political conditions and educated experts are needed to draft environmental laws that can actually be implemented. Croatia is a party to a number of major international environmental conventions and treaties and the signing of some of them is expected. NGOs should play a watchdog role to enforce the implementation of new laws and international treaties and conventions. Since legislation is incomplete and efficient environmental infrastructure is missing, enforcement will be difficult.

**CZECH REPUBLIC**

The state environmental policy was prepared at the end of 1993. The document sets in a comprehensive way clear priorities and deadlines for the individual components of the environment for economic sectors (energy production, industry, transportation, agriculture, raw materials) and for human health, education and social security. It outlines also intra-governmental cooperation. The policy is considered as an important breakthrough. It remains to be seen how successful the implementation is.

In terms of the energy, transportation, agricultural, fiscal, and taxation policies, the Government scarcely takes environmental concerns into consideration. However, an expert noted that most of those policies are not officially approved yet and might be reformulated.

There has been a gradual tendency to slowly transfer power to the regions. Together with the Ministry of Economy, the MoE for environment is preparing a regional environmental policy. The policy should clarify the responsibilities and authority of the regions.

Since 1990, almost the whole system of environmental legislation was replaced. The rapid adoption has resulted in some problems, e.g., discrepancies between environmental acts. Amendments and explanations to the laws have been necessary.

Some experts mentioned that because of the short deadline for compliance with the new strict regulations (5-7 years), often end of the production technologies have to be changed, which are costly and economically inefficient. They suggested to integrate more economic tools, so that businesses can find the optimal economic solution for the required environmental benefit.

There are major problems related to enforcement. The society doesn’t tend to consider breaking the law as reprehensible or unethical. The people tend not to report the infractions of which they are aware. The enforcement institutions face problems mainly related to management. They are not developed sufficiently, understaffed, and have insufficient technical support with measurement equipment.

**HUNGARY**

Facing the legacy of a contaminated environment on an unexpected scale, the government has been playing a rather reactive role so far. Now a change toward a long-term, preventive approach is needed. A national environmental policy and strategy based on the concept of sustainable development is being developed. Revenues collected on the basis of the polluter pays principle including various economic instruments should add resources for the carrying out of these programs. The short-term priority is the institutional and legislative framework building. The medium-term goal is the integration of environmental policy into economic policy. The present economic climate does not favor this, so the road leads through a series of compromises. Compromises are probably acceptable, however, if they do not allow irreversible damages to happen. Also, while relying on market-based economic instruments, the State will have to continue to intervene to
protect environmental interests from market excesses. Painful steps like raising energy prices to world market levels, delayed until now for fear of political consequences, will also have to be taken in the near future.

The Constitution of Hungary recognizes the right to a healthy environment. The Constitutional Court recently ruled that it is against the Constitution for the State to allow changes in nature or in the quality of environment representing setbacks from already achieved levels. The Court, and the “Ombudsman” (an elected Speaker for Civil Rights) will have to guard environmental rights. The new environmental law, submitted during the spring 1994, will have to be reviewed and passed by the new Parliament. The work of harmonizing Hungarian legislation with that of the EU must go forward. At the same time, compliance monitoring and enforcement capabilities of the inspectorate have to be improved. Incentives other than fines will have to be developed to motivate industrial compliance. Principles of public participation, right-to-know and freedom of information are appearing in legislation at various levels. They will have to be developed further and put into practice.

**FYR Macedonia**

Improvements in environmental policy are greatly needed in the FYR Macedonia. At the present time there is no official environmental policy. An unofficial environmental strategy was prepared in 1991, and is used by the Ministry of Urbanism, Civil Engineering, Traffic and Ecology to some extent, however the document was never officially adopted. Currently there is no separate office or department for environmental policy. (Indeed, there is no Ministry of Environment).

Improvements in environmental law are also a high priority as the country is currently without modern environmental legislation suitable for contemporary circumstances. The need for new environmental law is urgent as this should guide the development of new policies, standards and management methodologies. A new Environmental Law, based largely on the 1991 Strategy, has been drafted and is presently awaiting debate in Parliament. The draft law was formulated in consultation with many different groups, including scientists, businesses and NGOs, and has been accepted by the Government Administration. The draft law attempts to harmonize environmental standards with European norms.

Law enforcement is also very weak and in need of considerable improvement. One expert noted that the illegal activities of industry are almost entirely tolerated.

**Poland**

In 1991 the National Environmental Policy was adopted by the Government and Parliament. It is generally considered to be quite good and addresses priority issues, steps and actions to be taken, and tools and mechanisms to be introduced. Additional revisions are required, however, to make existing policies more practical to implement at the regional and local levels, as environmental management responsibilities are increasingly shifting there. The policy also refers to the activities of other Ministries. A new department for environmental policy has been recently established in the Ministry of Environment.

The environmental law is also generally considered as good, however certain improvements and amendments are required. Law enforcement is far from ideal. In some ways the strictness of existing laws obstructs enforcement as the laws are sometimes unrealistically stringent and do not allow for flexible solutions. Environmental monitoring is important for enforcement and current resources committed to the State Environmental Inspectorate should be greater.

**Romania**

Improvements in the areas of policy, law and enforcement are greatly needed. A National Environmental Strategy was formulated in 1992 in cooperation with the World Bank, however, its implementation has been very limited. While certain individuals within the MoE are responsible for policy development there is no separate office or department for environmental policy. New environmental laws are needed in many areas. At this time old outdated laws still govern environmental issues. A new draft Environmental Protection Act, and a Danube Delta Biosphere Reserve Law are presently under preparation. The lack of private property laws is also a problem, as currently a “tragedy of the commons” situation exists, in which many areas are still officially owned by everyone but nobody is directly responsible for protecting them.

Enforcement of existing laws is seriously lacking and this is perhaps an even greater priority than the enacting of new laws.

**Slovenia**

The Ministry is working on a national environmental strategy, and developing institutions and regulations under the Slovenian Environmental Project and other programs financed by Western sources. It is necessary to expand environmental policy, identify priorities, improve financial assets and incorporating the following issues: changing the current emphasis on lawmaking toward use of policy; assessing the state of the environment and identifying key problems and elaborating solutions to them; establishing necessary projects, etc.

**Slovak Republic**

A new official environmental policy was adopted in November 1993, (in accordance with the Environmental Action Program for Central and Eastern Europe). The new policy is more concrete and considered an important step towards working on the issues more conceptionally. The included subjects are: 1) air pollution and global environmental security; 2) drinking water supply and limitation of water pollution; 3) soil protection and food quality; 4) waste management and waste treatment; and, 5) biodiversity protection; optimal use of natural resources, landscape optimization. However, as an expert mentioned, no money has been allocated for the practical implementation of the policy in environmental protection.

The main principle of the previous strategy, elaborated by the Slovak Commission for the Environment was the principle of ‘ecologization’ of the following: human awareness, legal and economic instruments; the organization of territory, and; production technology. Under the term ecologization, a cross-sectoral approach and an infiltration of environmental concern into other areas was intended. The implementation turned out to be difficult.

Between 1990 and 1992, almost the whole system of environmental legislation was replaced. Several Acts are still under preparation, e.g., The Water Act, the Nature Protection Act, the EIA law, and the law on Risk Assessment.

As a result of the quick development of the new environmental law system and also because of constant and rapid changes in the changing structure of the economy, it is necessary to make amendments to the new acts. The integration with laws concerning other areas, for instance the economy, is insufficient.

Several significant problems exist in enforcement. Many companies can not pay the environmental fees and fines, most of the heavy industries are still state-owned. Usually no penalties are imposed if a company does not pay. There is a lack of options for enforcement. The technical support of the enforcement institutions is insufficient. Improving enforcement and compliance with the environmental law has been mentioned as high priority by most experts.
institutions; assessing foreign assistance programs; using environmental law and economic instruments as tools; reaching consensus with interest groups and within government to overcome sectoral divisions, and; public participation and communication.

The first crucial steps have been taken towards passing new law. The basic framework law on environment has been adopted by the Parliament, but sectoral laws and regulations are still needed. Until these are adopted, methodologies and standards necessary to implement the law will not be elaborated. The sectoral regulations are essential for the framework law to function, but may take 3-4 years to establish. The concept of the framework law is good, but impossible to enforce due to the lack of a proper environmental infrastructure and administration. This structure is currently being improved. A crucial aspect of the law is implementation of EIA. The new framework law mandates this, but it is still not effectively used, despite its urgent need for the last few years.
Environmental education is strongly needed for all members of society. Children and decision-makers should receive special focus. Environmental education should be introduced into the school curriculums. Public participation in environmental decision-making must be expanded and increased. Environmental awareness and concern throughout society is necessary for this to happen. Expertise at the government level has improved through know-how transfers, but broad-based campaigns directed toward the general public are also needed.

Czech Republic

The need to strengthen environmental education is a top priority. Forty years of scant attention to this issue has left a difficult obstacle to overcome. Improvements in education and training are beginning to develop gradually but more is needed. The level of expertise of the environmental actors has to be improved (a better understanding of the problems they face and the knowledge of alternative solutions and new technologies). A starting point would be to improve the information exchange regarding successful actions within the Czech Republic and the CEE region, as well as ideas and solutions implemented or discussed in the West.

Hungary

It is a commonly shared opinion that systematic environmental awareness raising and education is needed from the kindergarten through university studies. Ideally, environmental information should also be integrated into other science topics. Parliamentarians and civil servants would need on the job training in environmental management. While education is the long-term solution, media campaigns and NGO activities may contribute to make the population more sensitive to the most pressing issues.

Slovak Republic

The experts stressed that improving and strengthening environmental education on all levels should be a high priority. There is a lack of environmental professionals. Management and organization skills should especially be improved. The exchange of experience with Western countries would be helpful. A broad dissemination of knowledge concerning modern ideas and methods in the field of the environment is lacking.

An increase in public awareness and public participation regarding environmental issues is greatly needed to create pressure on decision-makers and to promote an atmosphere where solutions to problems can be elaborated and implemented.

The access to environmental information has to be improved and information about the actions of decision-makers and businesses regarding the environment should be more broadly disseminated.
4.4. Technology and Services

**Slovenia**

The level of environmental training and education is quite high in Slovenia, but more has to be done. The framework exists for training and, generally, technical training is good. There is a need for training specific experts (e.g., environmental economists, environmental lawyers, etc.). Environment should be included in all subjects. Elementary schools have the choice to introduce alternative programs. There is a fear, however, that due to being included in the official State school system, these programs might lose attractiveness. More support for out of school programs and alternative forms of education are needed. Many NGOs are involved in environmental education and public awareness raising programs. The media need to present environmental issues in a format that is more attractive to the public.

**Albania**

Most of the experts did not list technology and services as priorities, however, waste management and sewage treatment facilities were mentioned as a need.

**Bulgaria**

Various types of modern clean technology are needed, both for production and environmental protection. This is especially true in the energy sector. Existing boilers are old and pollution abatement equipment is lacking. New legislation now requires EIAs for new businesses (though their practical implementation needs further improvement) and a bill regarding environmental audits has been submitted to the council of Ministers. According to one expert, however, it may be some years before there is a strong demand for such services and technologies.

**Croatia**

There is a danger of dirty technology being imported as laws to prevent this are not in place or incomplete. A serious problem to be solved is the repairment of the damages caused by the war, since many environmental facilities have been effected.

**Czech Republic**

There is a lack of advanced technologies for environmental applications. Most abatement technologies are based on imported equipment. For the development of domestic environmental technology businesses, the Government could give more support in the form of subsidies or market incentives.

**Hungary**

There is no legal obligation to use the Best Available Technology in new enterprises, including environment related ones. Environmental services such as sewage treatment or domestic waste management are not drawing much interest in the process of privatization. Pollution treatment technologies, on the other hand, are improving. There is a wide selection of environmental consultants offering services such as EIAs but no certification process is ensuring quality or even proving basic capabilities.

**FyR Macedonia**

Modern technologies are greatly needed in many areas including air pollution abatement equipment for industrial facilities, the transition from coal to a natural gas heating system, wastewater treatment technology, modern environmental monitoring devices, and hazardous and communal waste treatment systems.

**Poland**

Fundamental improvements in economic performance are critical before expensive technology can be widely acquired and environmental investments can reach a satisfactory level. Tax incentives would encourage investments in technology. Currently the cost of capital for making major technological investments is prohibitively high. EIAs are becoming more commonly used and there is capacity within the country to conduct environmental audits. Alternative energy and hazardous waste management technology would be helpful.

**Slovak Republic**

Environmentally sound investments are greatly needed as well as the broad use of environmentally friendly technologies and products. The main problems, however, are the lack of investment opportunities and finding money for investments. There are some private companies which offer environmentally friendly technology, but this sector remains weak.

**Slovenia**

There are many enterprises still using outdated technologies. Slovenia is desperately in need of sanation programs. Many of those existing should be closed or refitted with new technologies. Western assistance is welcomed, but there is a concern about the importation of dirty technologies. So far, Slovenia has not been very threatened by dirty industries but the fear exists. The application of new technologies should be supported through economic and market instruments. An association of environmental businesses has been created within the Chamber of Commerce to create a market for these industries and services.
positive and negative impacts on the environment, as well as being significant for its extremely slow progress thus far in Bulgaria.

INTERNATIONAL PRESSURE from foreign assistance and financial institutions, as well as from market competition is having a positive effect on environmental protection because the government is required to agree to environmental improvements in order to receive aid, and competition improves the quality of products and technologies.

SOCIAL PROBLEMS resulting from the economic crisis, such as job and economic insecurity, dominate the priorities of the general public and government officials with negative environmental impacts.

PUBLIC PARTICIPATION in decision-making is having a positive effect but needs to be much stronger.

POLARIZATION OF INTEREST GROUPS is having a negative impact on the environment. There is no mechanism for State and local governments, NGOs and businesses to work together on solving environmental problems. The groups do not understand each others' positions and motivations.

MARKET REFORMS. The development of a market economy, privatization and foreign investments are assessed to cause both positive and negative impacts. Privatization is only just starting and massive foreign investment depends on the future prospects of the economy and the war. The potential for greater funds for environmental protection is a positive expectation from the reforms, however, if the necessary legislation to guide new development is missing or incomplete then the results will likely be negative. Another potential threat results from businesses often being led only by profit-making and not caring about environmental issues.

INTERNATIONAL RELATIONS AND COMPETITION. The following are considered to be positive driving forces: joining the EC and adopting European standards; international competition and export; tourism, because it demands a high quality of environment and there is competition with other tourism-oriented countries, and; involvement in international conventions and treaties.

WESTERN CONSUMPTION PATTERNS. Some look at it as positive, some as negative. At present half of the population would welcome sustainable development. When sustainable development will appear on the agenda, the society will probably polarize on the issue. Probably all characteristics of Western consumerism will appear sooner or later.

DEMOCRATIC CHANGES creating a basis for environmental improvement.

OTHER NEGATIVE DRIVING FORCES: the war; incomplete legislation; inadequate enforcement infrastructure; industry focusing on short term profits and considering environmental investments only as costs.

RESTRUCTURING the economy is the main driving force for both improvements and degradation. The decline in industrial production has been the major reason for some improvement in pollution levels, but this is not the desired way to achieve environmental benefits and the situation will be different in the future.

PRIVATIZATION could in the long run be a major driving force for improvement because it will correct the property rights issue, i.e., people take the responsibility to run their businesses efficiently and they can also be held responsible for compliance with laws. There may also be some negative impacts because people are behaving as entrepreneurs, seeking short term profits. This may mean exploitation of loopholes in the environmental laws and enforcement system.

ECONOMIC INSTRUMENTS for environmental protection that are presently employed are a driving force for improvements to some extent, but the system could be more efficient.

The INFORMATION FLOW on environmental issues has been improved. The increased environmental facts and data now available and accessible have resulted in an informal pressure for environmental improvements.

LEGAL PRESSURE in the form of new environmental laws and regulations, as well as partly improved enforcement, forces companies to adopt environmentally sound practices.

FOREIGN PRESSURE is not strong, except from Austria with its opposition to the planned nuclear power plant in Temelin.

WESTERN CONSUMPTION PATTERNS, the "throw away" mentality is perceptible. While this is a negative development from the environmental point of view, it is also inevitable and understandable. At present, the public does not seem to be aware of this
growing problem. Economic incentives, especially with respect to business practices, can be used to prevent, or diminish, wasteful consumption habits.

**HUNGARY**

PRIVATIZATION has no immediate positive effect as no green conditions are attached to privatization deals. Land privatization should have a positive effect on soil conservation and work against the wasteful use of chemicals.

INTERNATIONAL REQUIREMENTS on export goods and ecobanning for the domestic market is expected to work towards improvement in technologies and also awareness.

INTERNATIONAL RELATIONS and aspirations (e.g. the strive for EU membership) are a strong incentive for environmental protection. Domestic legal pressure is however weak.

DEMOCRATIZATION of public life is opening the field for local environmental incentives, but the public interest is tied down with economic concerns.

**POLAND**

MARKET REFORMS are having both positive and negative impacts on the environment. The most inefficient and usually the worst polluting industries were eliminated. More efficient use of resources was initiated. However, recession and unemployment has created a mentality of "economic growth at all costs," and thus short term thinking now dominates with environmental investments often being sacrificed.

DEMOCRATIZATION has allowed greater public participation in decision-making and numerous environmental NGOs have formed. On the downside, politicians’ personal ambitions and lack of experience effect the development of sound public policy.

WESTERN LIFESTYLES are becoming goals of society. There is a change in the hierarchy of values toward western standards, with an emphasis on material consumption. Aggressive marketing by foreign and domestic firms promotes this. The result is a flood of one-use packaging, and other environmentally harmful products such as automobiles.

EMERGING INTEREST GROUPS are increasingly influencing environmental decision-making. The pro-environment lobby is growing in size and capacity (NGOs, government administrations, green businesses and scientists), but remains weak in comparison with other interest groups (trade unions, industrial lobby) whose efforts are often harmful to the environment.

ECOMATIC INSTRUMENTS for environmental protection are in place and proving to be very effective. They utilize market forces and are becoming an increasingly important factor.

**FYR Macedonia**

THE NATIONAL GOVERNMENT, (along with industry) was most often mentioned by the experts as a driving force on the state of the environment. The failure of the Government Administration and Parliament to formulate and adopt urgently needed new laws, policies, management tools and methodologies has had a strongly negative impact on the environment.

INDUSTRY was mentioned equally with the national government as being a destructive driving force on the state of the environment. Industry has a very short-term emphasis on immediate profits and the responsible Ministry simply does not force them to comply with the laws. Industry does not place a priority on environmental protection and usually claims that it has no money to improve the situation.

NGOs, along with environmental experts were the next most cited force effecting the state of the environment. NGOs have raised public awareness of environmental issues and pressured the government to establish the needed laws and policies.

THE MEDIA was the other positive force most often listed by the experts. A large number of journalists are interested in environmental issues and have been very helpful in publicizing them.

THE GENERAL PUBLIC was mentioned by several experts as being a negative driving force on the state of the environment due to their lack of concern for, and abuse of it.

**THE ECONOMIC CRISIS,** worsened by the country's political conflicts with Greece and the effects of the Yugoslav war, was also cited by a few of the experts as having strong harmful impacts on the environment.

**MARKET REFORMS,** are a significant force effecting the environment, for better and worse. The loss of markets in the former USSR and non-competitiveness of Romanian industry has led to a substantial decline in production and thus a decrease in some types of pollution. However, as a result of the economic decline many people are suffering financially and poverty is increasing driving intensified exploitation of natural resources.

PUBLIC PARTICIPATION AND NGOs are having positive effects on the state of the environment through improved public policy and environmental awareness raising.

INTERNATIONAL TRADE AND OPEN BORDERS has had both positive and negative effects. Western firms dealing in polluting and hazardous industries have come to Romania looking to take advantage of weak environmental regulations and enforcement. At the same time, open borders have allowed access to more environmentally friendly products and technologies.

INTERNATIONAL FINANCIAL INSTITUTIONS are also influencing environmental protection in Romania, largely for the better. The government is in serious need of money, and institutions like the World Bank provide such assistance but with conditions for environmental improvements. As a result the government has been forced to improve policies and management. Unfortunately, the World Bank usually supports only profitable projects which means that some efforts which might be more beneficial to the environment but which have less quantifiable or more long-term benefits do not get implemented.

GOVERNMENT AUTHORITIES are cited as being another driving force. The environment is simply off the agendas of most decision-makers and a very conservative mentality giving special treatment to heavy industry still persists. The Government has to operate under the given economic realities and unfortunately those realities are very difficult.

INDUSTRY another force for negative change. It has minimal concern for environmental issues, is largely unregulated and strong enough to effectively influence government decision-making.

MASS MEDIA is an emerging force for positive change, with newspapers, radio, and television giving attention to the environment.
POLITICAL AND ECONOMIC LOBBIES can be negative driving forces. Additionally, foreign trade and investment sometimes results in negative environmental impacts. For example, Austrians promoted a deal to accept hazardous waste in return for financing a waste incinerator in Bratislava.

ECONOMIC RESTRUCTURING. Already, or very soon the economic sector will be the most important driving force. Restructuring of the economic system, privatization and change of ownership, western investment and the adoption of western technologies will directly affect the environment in both positive and negative ways. In general, western technology provides benefits to the environment, while short term profit ideology tends to negatively impact the environment. Economic instruments are scarcely a driving force, at least at present.

FOREIGN PRESSURE comes from Austria because of the existing and planned nuclear power plant in Jaslovské Bohunice and Mochovice, respectively and from Hungary because of the water power plant in Gabčíkovo-Nagymaros.

OTHER: Positive driving forces towards environmental preservation and improvement in Slovakia include, the activities of environmental movements and volunteers, the work of experts, scientific research, and positive pressure through diplomatic channels.

SLOVENIA

PRIVATIZATION is looked at in the short-term as a negative driving force, lacking proper safeguards for environmental protection. The privatization law has not included environmental aspects and there are no clear regulations about who is responsible for the liability. Also there are no enforceable regulations and standards concerning cleanup (no compliance schedules). Environmental auditing is not obligatory. In the long-term it can be positive if the new owners accept environmental obligations.

MARKET INCENTIVES initially have negative but later positive impacts on environmental protection. But as environmental protection is not inherent in a free market system it should be supported by countering measures.

ECONOMIC RESTRUCTURING could be a positive factor if the general process could be directed in environmentally friendly ways, but there is a high probability that if the present lines will be followed environmental protection will not be a priority.

JOINING THE EUROPEAN UNION will be a strong driving force towards environmental improvement, thinking and acting in the right direction as Slovenia will have to comply with EC standards and Western environmental attitudes if it wants to export to those markets.

WESTERN TECHNOLOGIES can play a negative role if they are not applied with the necessary infrastructure.

OTHERS FORCES include Western consumption patterns (in negative sense) and environmental education and growing public awareness (positive).
6. Integration of Environmental Protection and Economic Development

6.1. Obstacles to Integration

**ALBANIA**

Because of the fact that economic and social problems are enormous and have absolute priority in Albania, and environmental policy does not have an important place in national policy, integration of environmental concerns into economic and other policies is out of the question. The Committee for Environmental Protection is a weak authority, which lacks influence and institutional strength to achieve such an integration. Personal relations within the government appear to be very important and the experts gave the impression that the CEP does not have a strong relationship with other ministries or with the Parliament.

**BULGARIA**

The most often mentioned obstacle was the lack of money. Economic development itself is not progressing well and the various market mechanisms widely used in other countries do not yet function in Bulgaria. The situation is worsened by the lack of the necessary legal basis on which such integration, the weak enforcement of existing law, and the continued State ownership of virtually all large industrial enterprises. Some economic mechanisms have been developed for environmental protection but their effective implementation is limited by social impacts and inflation.

Environmental protection is also simply not a priority. Economic concerns receive priority and decision-makers are not able to understand the importance of, or possibilities for, integrating economic development and environmental protection. The dominant thinking is "environmental protection is expensive and we are very poor, so it will have to wait." Government officials lack the experience and knowledge needed to grasp the concepts and formulate the needed strategies. People working in the MoE lack expertise about market economies and economists lack expertise about the environment. The current political constellation is also not likely to support such integration.

**CROATIA**

Due to the war there are other priorities now in Croatia. So far there are no positive signs of global thinking, usual arguments are no funds, protection of the environment will slow down development. There is no coordination between environmental and economic policy, and no integration. In principle it could be done but it’s not happening. The cooperation between ministries is not sufficient and not encompassing all the necessary sectors. This thinking is already there in the ministry of environment but not in others. Lack of expertise in some specific fields, insufficient involvement, lack of coordination and cooperation with outside experts are also often mentioned as obstacles.

**CZECH REPUBLIC**

In economic policy, environmental concerns are usually not taken into account. Environmental protection is considered as an issue that can be solved only when the economy is strong enough (tendency e.g. in Government). The most critical factors to improve the situation are: better knowledge about environmental issues especially in non-environmental circles, and improved information exchange with the industrialized countries of the West regarding successful policy integration and policy instruments and mechanisms. The lack of broad dissemination of this information is on all levels (literature, personal contacts, int. treaties). Furthermore, the lack of cooperation and the conflicts of interests are hindering an integration. An example is the introduction of the planned ecological tax: the Ministry of Finance is not interested in taking steps, the interventions of the green lobby show good will but the results are complicating future steps. In fact it is unclear what the ecological tax should include.

**FYR MACEDONIA**

A variety of obstacles exist in the FYR Macedonia to integrating environmental concerns into economic development. Most often mentioned by the experts was the absence, or inadequacy of, environmental policy and law just making it harder to achieve such integration. The next most cited obstacle was the lack of financial resources to implement environmental protection considerations in economic development. Several of the experts also explained that other priorities, particularly economic and political issues, were dominating decision-making processes. Politicians were described as being preoccupied with international issues and re-election campaigns. The poor performance and capacity of the government was also cited as a major obstacle, as was the lack of a separate Ministry of Environment. Government (and industry) officials are simply unable to understand how economic development and environmental protection can be integrated. There is a lack of expertise in formulating the necessary policies and mechanisms. In some cases government decision-makers just do not care about environmental issues. The generally low level of environmental awareness and concern in all segments of society is another obstacle.

**HUNGARY**

As decision makers see the environment as an externality to the economy, there is not much incentive for the integration of environmental costs and benefits in the governmental decision-making. The monetary value of environmental assets is difficult to measure in economic terms (and in some cases controversial, too). However without these charges and penalties will not reflect real values. At present, environmental expenditure is not regarded as an investment.

**POLAND**

Many of Poland’s government officials and politicians do not realize the importance of integrating economic and environmental concerns. Furthermore, communication and cooperation amongst the political parties, or the different government ministries is sorely lacking.

There is also a serious shortage of funding for environmental investments generally, including integrative measures. Environment is low on most agendas as economic issues dominate priority lists. Market reforms have helped the short-sighted mentality of “profit now” to become widespread, often resulting in environmental expenditures being cut, because viewed as drains on profits. NGOs and the pro-environment lobby have failed to persuasively illustrate to decision-makers the inseparable link between the long-term health of the economy and the health of the environment. Economics guide decision-making but environmentalists have not effectively used economic arguments for environmental protection.
The main obstacle is the false belief held by decision-makers that environmental concerns only obstruct and hinder economic development. They do not understand how a healthy and clean environment is a necessary base for a sustainably strong economy. The situation is worsened by the plain fact that the environment is simply a very low priority for people. There is no widespread support for environmental protection, thus it is not on the agendas of decision-makers. This contributes to the MoE being the weakest ministry in the government. The other ministries have no support for the objectives of the MoE. The current dominance of short-term thinking and the drive for immediate results excludes proper consideration of the long-term benefits to be gained by environmental investments.

There are also more practical, but nonetheless serious obstacles such as the lack of a legal mandate for such integration, the lack of necessary expertise and knowledge, and the severe shortage of money required to address these issues and to make needed capital investments.

With the exception of some very rare cases, economic and environmental policy are not integrated at all. Obstacles are: on all levels, there is a serious lack of broad dissemination of information and awareness of modern ideas and approaches to harmonize economic concerns with environmental ones. The ideas that "environment is an obstacle for economy" and that "it can be solved when the economy is well established" persist; economic planning involves a short term goals tendency, while the environment requires long term thinking; there is a lack of information exchange and the cooperation between these two sectors (as well as among others) is only at the beginning, and; there is official support of economic interests over environmental interests.

Formally, environmental protection and economic development are integrated but there are no real signs of this. Ministries do not work together and do not tackle environmental problems in a complex way. The potential exists but due to the logic integration does not occur. The MoE has to fight with other ministries to protect environmental interests. In the case of projects with foreign assistance, there is not always a complex approach in evaluating all of the impacts and sometimes environmental interests are damaged. Politicians don't understand that Slovenia could profit from integration in the long run, they focus on short-term interests.

### 6.2. Existing and Proposed Measures for Improving Integration

#### ALBANIA

A draft law for the establishment of environmental impact assessments is being prepared. (No other measures were described.)

#### BULGARIA

Concrete examples of sustainable development are lacking. The concept exists on paper but nothing more. There are efforts to implement the polluter pays principle. There are fines for air pollution and wastewater discharges, however, the amounts are very small and the industries just pay them without effect. With the State still very involved in the production sector, the effectiveness of the polluter pays principle is very limited. The idea of tradable pollution permits has been proposed but no concrete steps have been taken. The use of environmental impact assessments and environmental audits is becoming more common and should be helpful.

#### CZECH REPUBLIC

The topic is under discussion in some environmental circles, as well as a few economic circles. Though, this discussion is limited and no concrete measures have been taken to address this issue. The issue is not understood by the key sector of government and therefore only a small number of actions are in place. In the state environmental policy, however, the gradual integration of environmental considerations into all economic and social activities is outlined as a long term goal. Sustainable development should be integrated into the Czech Republic's environmental policy according to the ideas laid out in the Rio conference. The concept of sustainable development is not clear to a lot of people.

#### CROATIA

A national environmental and development strategy with the proper law could facilitate this. The Parliament should play an important role in adopting these and putting pressure on all players. Training is needed on how to establish integration, how to elaborate win-win solutions, low cost investments and no cost programs including economic efficiency and environmental management. How to reach compromises between the different interests should be learned. Sometimes it may be more efficient to invest in industry to reach energy efficiency or restructuring. The use of financial incentives and pricing can be one of the methods to reach results.

#### HUNGARY

International treaties like Agenda 21 and the Lucerne documents should become part of government policy. EIAs should be introduced on all government policy plans. On the job introduction to environmental management should be offered to civil servants of all government branches. Laws and regulations should be trimmed to allow the market to take care of some of the problem. Tradable permits, taxes, user charges and deposit refund systems are some of the possibilities. Also, the introduction of environmental insurance policies ought to be initiated. A bottom-up approach should also be started, with local authorities taking an integrative approach to regional development. Local authorities are best placed to introduce communication between the interested parties.

#### FYR MACEDONIA

Unfortunately, the experts were not aware of existing measures for improving the integration of environmental concerns into economic development and they could not list any examples of sustainable development or the polluter pays principle. The new draft environmental protection law was, however, cited several times as a proposal to make
advances in these areas. The concepts of both sustainable development and the polluter pays principle are included in the draft law, which has been approved by the Government and is now awaiting debate in the Parliament. The draft law also includes requirements for EIAs for certain types of projects.

**POLAND**

The concept of sustainable development is often discussed but few concrete examples exist. A sustainable development plan has been designed for the “Green Lungs” area, and accepted by the local and State governments, however, funds to support it have been very limited and implementation is only in the beginning stages. There is hope that Poland’s National Parks will use a new management approach and involve local communities in practical but sustainable use of the parks’ natural resources. The polluter pays principle is well established in the country as Poland has one of the most advanced systems of pollution fees and fines in all of Europe. Tradable emission permits have been experimented with successfully and pose optimistic possibilities for the future. Environmental impact assessments are becoming more commonly used and an Inter-Ministerial Unit has been formed to address environmental issues related to privatization.

**ROMANIA**

The MoE is organizing an inter-ministerial commission that will attempt to address environmental issues in the transition process and a governmental counsellor will probably be engaged to deal with environmental problems. Some progress has been made in the field of water management with the introduction of a fine system and a “Water Fund”. A variety of pollution fines exists but the amounts are very low and they are not yet effective as incentives to reduce pollution or as sources of revenue for environmental investments. Unfortunately, few concrete examples of sustainable development or the polluter pays principle were cited, with one exception being the Water Fund mentioned above. Both of these concepts are, however, included in the new draft environmental protection law which is in Parliament.

**SLOVAK REPUBLIC**

At present, there is no official approach or concept provided to harmonize environmental concerns with economic ones. However, development concepts for different branches of economy are being elaborated at present (energy, mining, metallurgy). The draft material is consulted with the MoE. It remains to be seen whether this cooperation will result in better integration in practice. The efficiency of economic instruments for environmental protection is low. Charge and fine rates are too low to provide real incentives to change pollution behavior. An obstacle for enforcement is the situation that most of the big industrial pollution sources are still state owned. Many companies are not able to pay, the amount of fines and charges that should be paid is much (about 30 times) higher than the net collected amount. At present, the Government has expressed little or no interest in adopting new market incentives that would benefit the environment.

**SLOVENIA**

The prevailing liberal economic policies have to be made environmentally friendly. The legal framework is given for sustainable development but it needs to be put into practice. A proper strategy should be elaborated to direct the economy in a different direction. PPP should be enforced. Short-term thinking should be exchanged for long-term thinking. Economic programs must include environmental aspects and this should be enforced.
7. Financing Environmental Improvements

**ALBANIA**

The Committee for Environmental Protection (CEP) is mainly dependent on the State Budget and has very limited resources to finance its activities. The budget (from the Ministry of Health) is sufficient to pay for the staff and some small scale projects. No money from environmental taxes, fines or other instruments are earmarked for the environment. Hence, CEP is mainly dependent on foreign aid and cooperation with international organizations. The CEP has ideas to introduce an ecotax, but this proposal is in a very early stage. Too little experience with this approach is available in Albania.

**BULGARIA**

The major financial mechanism for environmental protection is the state budget. In 1992 the National Environmental Protection Fund was established. There are some pollution fees and fines, but it was stated that the amounts actually collected are insignificantly small. Apparently there are plans to further develop the pollution fines system and to introduce new environmental taxes. Municipal Environmental Protection Funds also exist and there are also incentives in the forms of tax reliefs and exemptions for environmental technologies.

With domestic finances water purification stations are being constructed in certain strategic areas, it should also be possible to develop environmental education programs, protect valuable natural areas, enhance public participation in environmental decision-making and implement small-scale projects at the local level. To properly manage hazardous waste, build wastewater treatment facilities for large cities, make nuclear power plants safer, and install modern pollution control equipment foreign financial assistance will be necessary.

**CZECH REPUBLIC**

The situation regarding the financing of environmental investments needs to be improved. A major problem in obtaining money for environmental investments is the short time required for repayment of a loan, usually four or five years. For long-term environmental investments, often a longer term is necessary for repayment. In addition there are no guarantee funds available for environmental projects, banks are not prepared to bear the risks at this point. Some banks in the Czech Republic have a policy on environmental management. The State Fund for the Environment could grow large in the future as more companies are required to pay into it. The management of the fund is interested in how to improve the decision-making process and to establish a loan system to replace the current grants system.

Companies complain that the current structure of economic instruments is inefficient and doesn't provide much incentive for environmental improvements (e.g. fees for air pollution). The situation is better regarding wastewater (fees reflect investment and operational cost) and in the area of waste treatment (they can compare whether it is more useful to invest in energy and water should work as incentives, but their introduction carries political risks. Consumer pressure is expected to rise in reaction to ecolabelling, but certainly not in the short term. Also, ecolabelling will only be applicable to a limited set of products.

**CROATIA**

In the present economic situation it is difficult to get funds from the state budget for environmental purposes, as the environment is not appreciated as it should be. There are no environmental funds at the state or regional level. The new draft law plans to establish a state fund and some money will go to the local level as well. Also, probably a stronger MoE will be able to get more funding. At present there are only small funds available. Waste and wastewater treatment can be paid for by taxes and other incomes from the local level. Part of the prices collected for sewage system and water supply can be used for environmental purposes but only some is left at the local government level.

The idea of using economic incentives as efficient tools for environmental management is widely accepted, but few instruments are in operation: some tax preferences, (fuel and tourist tax), tax preference on non-led petrol, environmentally friendly packaging; a fee system for water pollution; user's fee for extraction of minerals, ecological rent in waste management and pricing system introduced in the field of energy. Some of the above are functioning well, but they can only have a limited impact as they are isolated examples, and there is no proper management framework behind them. A part of the money is channelled back to the State budget, not toward environmental investments. Some of them, like the fees, are nominal. Improvements should be made in the pricing system including making clear differences between industrial and household energy use, and urban and countryside consumption.

**HUNGARY**

The Central Environmental Protection Fund is a state fund earmarked for financing environmental measures with environmental related revenues bypassing the Budget. Sources are fines, product charges, user fees, and funds allocated from international aid programs. The Fund has a separate administration under the auspices of the MoE. Five major foreign aid sources financing environmental projects are EU PHARE, OECD (bilateral), German Coal Aid, US AID and international NGOs. Hungarian banks have no special schemes to finance environmental investments. EBRD applies environmental auditing to all its programs. Privatization deals sometimes include obligations for abatement of past pollution in return of price cuts. However, in such cases many buyers prefer more expensive green field investments. In cases of immediate environmental hazards the State has intervened to contain the pollution. The new environmental law draft foresees a series of economic incentives, but their introduction carries as yet uncertain. Presently fines, user charges and product taxes are the only existing measures, and they all have a punitive character. More realistic prices for energy and water should work as incentives, but their introduction carries political risks. Consumer pressure is expected to rise in reaction to ecolabelling, but certainly not in the short term. Also, ecolabelling will only be applicable to a limited set of products.

**FYR MACEDONIA**

According to the experts the only financial mechanism for environmental protection is the general State budget, and this source is too small. One expert noted, however, that the polluting enterprises themselves make some investments in environmental protection and that the government tries to monitor and record these investments. Some new mechanisms are proposed in the new draft law, such as pollution fines and an environmental tax on automobiles.

Most of the experts believed that environmental legislation and policy could be improved with existing resources, and that law enforcement could be carried out much more effectively. Several experts stated that small local problems could be successfully addressed and communal waste management was cited as one
such example. Improvements in environmental education and awareness raising were mentioned by a few experts, as was the reduction of air pollution from automobiles. Other issues noted were the establishment of a National Environmental Fund, energy efficiency and completion of the conversion to natural gas, and the establishment of a separate MoE.

Problems mentioned as being solvable only with foreign assistance included hazardous waste management and the protection and restoration of the major water bodies - Lakes Ohrid, Prespa, and Dojran, and the Vardar River. These will require extensive water treatment facilities.

**POLAND**

Poland utilizes a variety of sources and several very effective financial mechanisms for environmental protection. Chief among them are national, provincial and local funds for environmental protection, which are financed by pollution fines and natural resource user fees. These funds provide soft loans and grants for environmental investments. Poland also has ECOFUND, an innovative debt for investments. Poland also has a 31

**SLOVAK REPUBLIC**

Sources of funding include: the State budget, the State Environmental Fund and foreign assistance. In the State Environmental Fund, the revenue of the environmental fines and charges is deposited. The money is then redistributed through a grants program. The Government is currently discussing to establish a “revolving fund” which is intended to be a mechanism for softening loans for environmental improvements. This program will probably be open to companies as well as to municipalities.

**ROMANIA**

The general State budget is virtually the only mechanism for financing environmental protection. The amount of money appropriated from the State budget for environmental purposes is already very small and diminishing. In theory there is money generated by various pollution fines, but in reality this money is so minimal as to be insignificant. International institutions also contribute for environmental protection and there is financial support for NGOs coming from foundations. New mechanisms, including stronger pollution fines, environmental taxes and a National Environmental Fund are proposed in the draft environmental protection law.

Some environmental problems can be solved with domestic resources, but it is difficult to know to what extent given the uncertainties as to just what the domestic resources are. Problems which might be solved using domestic resources include nature protection, repairing and maintaining existing pollution abatement equipment and environmental damage caused by poor agricultural practices. Foreign financial assistance is probably needed for new environmental technologies, especially in connection with large capital investments like wastewater treatment facilities and air protection devices. Remediating serious environmental hazard areas will also likely require foreign assistance.

It is a real problem that there are no tax breaks or subsidies to encourage businesses to invest in environmentally sound practices. For example, there were initiatives to separate plastics from the municipal waste in Bratislava, but the lack of incentives for recycling the plastics defeated the enterprise. In the tax system, which consists of 8 special taxes, an ecological tax is exists. But it is not in force yet and in fact nobody knows, how the ecological tax should look like.

**SLOVENIA**

There is a decrease in funds for the environment. In Slovenia some economic instruments were already in use in past years. An Ecofund existed in 1989-90. It was financed by taxes on water management, and the use of the environment in the fields of air and waste. 35mln USD were collected. The previous government system, however, eliminated the funds in 1990 and therefore Slovenia has lost more than 60 mln USD of funding. Environmental projects have since been funded from the State budget and by foreign assistance programs, as well as fees and penalties paid by polluters. The new environmental law entails setting up an Environmental Fund which will be financed partly from the State budget and partly from foreign loans.

Some of the major environmental projects are funded by international development banks (World Bank, EBRD). These loans should be payed back with money eventually generated by the investments. Local communities get funding from industrial users of the environment and larger contributions are being requested from local residents for waste and water management projects and gasification. The idea of applying economic instruments is widely accepted in Slovenia. The Environmental Fund will be operational from 1994. However the Ministry of Finance is against earmarking funds for the environment and would prefer the use of the central budget and banking system. Economic instruments currently used (taxes, fees, penalties) serve more to augment the budget than to provide incentives for environmental protection. Increases in energy prices are also considered as a possible way to generate funds and protect the environment.
8. International Cooperation

**ALBANIA**

CEE - REGIONAL COOPERATION

There are possibilities for cooperation with other CEE countries regarding transboundary nature areas and waterways. Other CEE countries were considered to lack the necessary experience and insights to be helpful. Western experience was seen as more valuable. Cooperation between NGOs was mentioned as helpful by those experts that were involved in them. They also consider exchange of experience with NGOs from West and East as useful.

WESTERN ASSISTANCE

Albania has less experience with Western assistance than many other CEE countries since Western countries "discovered" Albania somewhat later. CEE NGOs promote assistance from Western NGOs as very valuable, because it gave them more insight into their own problems and possibilities. Most of the experts sharply criticized the fact that much of the money "given" by donors returns to the donor country. Western consultants are seen as earning too much money for collecting data that are already available, and are also blamed for excluding Albanian experts from the projects. No real exchange of know-how and experience can take place in this way.

Almost all the recommendations and actions in the Albanian National Environmental Action Plan need foreign funding, and agreements with many of the major international financial and development institutions have been reached.

One of the experts mentioned that it is most useful to receive assistance from another Western country in connection with a subject on which that country has very relevant experience. Albania could especially benefit from assistance in the areas of transport, ecological agriculture and tourism.

**BULGARIA**

CEE - REGIONAL COOPERATION

There has been very little cooperation with CEE neighbors. One reason is that they are also poor, and another is that after the communist system collapsed there was a natural tendency to move away from cooperation after so many years of forced alliance. Some cooperation exists regarding the Danube River and the Black Sea, but it is limited. Countries of the region have common histories and it would be helpful for them to cooperate in forging their own paths toward sustainable development. Regional cooperation is clearly needed on issues involving the Black Sea and the Danube River, as well as transboundary air pollution. Cooperation would also be helpful in attracting and better using foreign aid.

WESTERN ASSISTANCE

Examples of successful cooperation with Western countries and institutions include: professional training supported by the EC PHARE Program and US AID; the National Environmental Strategy prepared with help from the World Bank, and; help from the Swiss, Germans, the British Know-How Fund and British Council. The "Environment for Europe" process has been helpful in this regard and the upcoming European Environmental Ministers Conference in Sofia, 1995, should have a positive influence on the Bulgarian government and NGOs.

There have been some negative experiences with western countries as well. There was a well publicized case of a German firm trying to export its hazardous waste to Bulgaria. Sometimes foreign aid institutions are deciding what to fund without the input of local experts, while on other occasions the priorities of the aid institutions are not the same as Bulgaria's. Additionally, the loan policies of international financial institutions are not very favorable. Up to this time most of the Western aid went into policy improvements and institutional capacity building. Now support should be given for concrete activities that will yield measurable improvements in the environment. Investments in technology are needed, as is help in harmonizing legislation and regulations with EC standards. National and local consultants should play a more significant role in projects supported by foreign assistance. Expertise in many areas continues to be a need, as does management training.

**CROATIA**

CEE - REGIONAL COOPERATION

There are many common problems where regional cooperation would be helpful in devising solutions, especially with Slovenia and Hungary. This type of cooperation could also help with building better relations with the West. There is a need for common steps and measures to improve the quality of environment and to decrease transboundary pollution.

WESTERN ASSISTANCE

External funds are very much needed as internal resources are extremely limited. However, the main problem with Western financial assistance is that it is strongly connected with the use of Western technology and expertise. Western help is more positive if the technical expertise is oriented toward a concrete field of knowledge which is missing. Presently Croatia is not involved with the main Western assistance programs due to political reasons. Environmental problems requiring external funds are: communal and hazardous waste management and clean up; protection of the main rivers and the Adriatic Sea, and; the establishment of a monitoring system.

The greatest value of international cooperation is seen as the experience and knowledge to be gained rather than the amount of money. Assistance is especially needed in the following areas: legal and legislative expertise; enforcement; training in environmental management; cooperation in research, information systems and equipment; environmental education; post-war reconstruction of ecotourism, and; restoration of the environmental quality of national and natural parks.

**CEHCE REPUBLIC**

CEE - REGIONAL COOPERATION

There is a strong need to strengthen East-East dialogue. However, it is not perceived as urgent by the public, probably due to the rejection of the commonly shared past four decades and a stronger orientation, in general, towards Western Europe. On the other hand, East-West cooperation has developed more sufficiently.

WESTERN ASSISTANCE

The experts stressed the numerous positive experiences with Western assistance. Proposals to improve the effectiveness of foreign assistance include: ensure the adequate involvement of local representatives and experts; support the projects on a long-term basis (implementation), and; most importantly; financial support and knowledge with respect to problem solving techniques in the West. Some experts noted that there are no issues that can only be solved with foreign assistance and that the situation concerning external financial help is not critical.

The experts listed some issues which could be addressed more quickly with foreign support: converting existing plants (e.g. power plants) into model facilities with state-of-the-art abatement technology and integrated environmental management, and; assistance in the areas of science, assessment, some special technologies, and local or regional planning.
**HUNGARY**

**CEE - REGIONAL COOPERATION**

Occupying the middle of the Carpathian basin, Hungary gets 20% of its surface waters from neighboring countries. This alone makes international cooperation on the environmental field an absolute necessity. However, the former Eastern-Block countries cut most of their relations at the ministerial level. Environmental diplomacy lags behind foreign relations in general. Joint environmental actions do not exist, but ongoing cooperation between experts of the regional authorities continues. Improving on this would be very helpful.

**WESTERN ASSISTANCE**

Positive examples include: know-how transfer, institutional development, and project financing. Negative examples were cited as: aid which was largely consumed by donor country consultants for feasibility studies which were not followed by with investment. The type of aid needed: programs adapted to the needs of the counties; e.g. working examples of environmental technologies should be set up and publicized.

**FYR Macedonia**

**CEE - REGIONAL COOPERATION**

Examples of successful cooperation with other CEE countries were extremely limited. Some cases of cooperation with neighboring countries were cited at the NGO level, however, no such experiences at the government level.

CEE cooperation would be very helpful in many areas, and is absolutely essential on some. Effective protection of Lake Ohrid requires close cooperation with Albania, with whom the FYR Macedonia shares the lake. Lake Prespa is shared with both Albania and Greece, and likewise, its protection requires cooperation between the three countries. Lake Dojran is in a critical state due to water diversions in Greece, and in this situation cooperation is essential. The Vardar River is also shared with Greece and requires significant improvements.

**WESTERN ASSISTANCE**

The large majority of experts stated that there had not yet been any foreign assistance for environmental protection in the FYR Macedonia, thus they could not cite any positive or negative experiences. Cooperation with foreign NGOs has been better than anticipated, one expert reported, with REC, FOEL and Greenway all providing important assistance.

Several types of foreign assistance would be especially helpful in the FYR Macedonia according to the experts.

**ROMANIA**

**CEE - REGIONAL COOPERATION**

Romania has had some successes in cooperating with its CEE neighbors in addressing environmental issues associated with the Danube River and Black Sea. Successful cooperation with other CEE countries on environmental issues has, however, been extremely limited and improvements in this area are sorely needed. Such cooperation is clearly essential for effectively protecting these two areas (Danube River and the Black Sea) and would also be helpful in dealing with transboundary air pollution, harmonization of environmental standards with EC norms, and the development of nuclear safety plans. Stronger economic cooperation within the region would also improve environmental conditions in the individual countries.

**WESTERN ASSISTANCE**

There have been a number of successes in which western assistance played an important role. EC PHARE and the British Know-how Fund have supported environmental assessments and the World Bank provided significant help in developing a National Environmental Strategy. US AID has provided much needed training through the ETP program and NGOs are supported by REC and various western NGOs.

It is important for the aid recipients to be prepared to receive the aid and to be able to suggest how it might be best used. The Romanian government and other institutions receiving aid have not always been adequately prepared. A considerable amount of the aid money actually went to foreign experts making short-term visits to prepare feasibility studies which lacked meaningful input from local experts and were not realistic.

Western assistance should move beyond feasibility studies and assessments and should support direct concrete actions such as technological investments and cleanup of the most severely damaged areas. Expertise and training would also be especially helpful in numerous areas, including: management training for government, industrial, and NGO leaders; the

**POLAND**

**CEE - REGIONAL COOPERATION**

Cooperation within the CEE countries exists but is quite limited. Cited examples include cooperation with the Czech Republic and Germany regarding the "Black Triangle," with the Czech Republic and Slovakia regarding the "Silesia Project," with Slovakia and Ukraine concerning the Carpathian Biosphere Reserve and Lithuania, Belorussia and Ukraine in connection with the "Green Lungs of Europe" project. The experts agreed that East-East cooperation should be improved and listed the above-mentioned areas and the Baltic Sea as priorities.

**WESTERN ASSISTANCE**

Numerous capital investments involving water treatment facilities and air pollution abatement equipment, training in the areas of environmental management and methodology, and NGO development programs are examples of productive assistance provided by a wide range of western countries and international institutions.

Some examples of positive experiences with western aid were also cited. Poland's new forest management program, sponsored by the World Bank, was criticized for promoting unsustainable harvest levels and requiring the purchase of heavy Western equipment unsuitable for Polish forests. Other criticisms were aimed at western firms promoting their technologies which have been banned (i.e. pesticides) or have fallen out of public favor (i.e. waste incinerators) in the West. Many of the experts explained that much western assistance is actually consumed by the donor countries themselves, as costly donor country consultants perform feasibility studies while being housed at Poland's most expensive hotels.

Most of the experts agreed that while feasibility studies may be essential elements of project planning, investments leading to actual environmental improvements are needed at this time. Additionally, western assistance in the form of certain types of expertise, especially concerning modern technologies and management methodologies greatly needed. Assistance should take the form of joint ventures in which Polish experts and Polish resources play significant roles. ECOFUND, Poland's development foundation, was mentioned as a very effective assistance mechanism. On a more basic level, some of the experts mentioned that environmental protection would be facilitated by strengthening Poland's economy, and that this could be accomplished by the elimination of existing trade barriers.

**A 33**
The development of post-graduate university programs; and the use of methodologies like environmental impact assessments. Assistance should come in the form of partnerships and make maximal use of Romanian input.

**SLOVAK REPUBLIC**

**CEE - REGIONAL COOPERATION**

The experts listed the following issues in which CEE cooperation is important and required (or already developing): transboundary air pollution; transboundary water pollution (e.g., Danube issues); transboundary movements of waste; energy; harmonization of environmental policies; establishment of common National Parks (e.g. in Beskides on the Slovakian and Polish border, Danube-Ipel/Ipoly on the border of Slovakia and Hungary); protection of forests; environmental education and expertise, and; NGO cooperation.

**WESTERN ASSISTANCE**

Many positive experiences with western assistance have already been enjoyed, especially in the field of problem identification and analysis and solution development. However, it was stated that assistance should then continue for the implementation of the recommendations, especially regarding investment loans, as this is the major obstacle to implementation.

Environmental advocates criticised the European Bank for Reconstruction and Development for investing in the aluminium plant in Ziar nad Hronom, a great and serious pollution source and major energy consumer.

Apart from many positive examples, experience thus far has shown that Western technical assistance is not always working in the most efficient and long-lasting way. More local experts should directly participate in the projects. Projects could be more closely adapted to the local conditions and locals could profit more from western experience, management and problem solving techniques. Often feedback and discussion of the results is inadequate. More assistance should be provided to small enterprises and NGOs.

Additional assistance would be especially helpful in the fields of: environmental management in the state administration and NGOs; to incorporate environmental principles into the economic strategies, especially the energy policy (efficient use of energy and energy saving program, alternative sources of energy); to address mobile source air pollution; and to propagate a sustainable way of life.

**SLOVENIA**

**CEE - REGIONAL COOPERATION**

East-East cooperation should be strengthened. There is a huge similarity of problems as well as accumulated knowledge that should be shared to the benefit of the region.

**WESTERN ASSISTANCE**

There have been both positive and negative experiences with Western assistance. It is positive is that Western banks demand certain environmental plans and standards before supporting projects. It is negative that Western assistance is usually more oriented towards opening markets for their own technologies, products and experts. Also, in some cases the Western technology which was applied was not appropriate.

The process of getting assistance should be more transparent, and the CEE countries (MoEs) should be more involved in the preparation of terms and selection of consultants. The success of the assistance depends on how much money can be spent in the country, and how much knowledge can been transferred. Local consultants need to be involved. The usual problem with Western assistance is that the foreign consultants involved don't know about the region.
9. Interest Groups in Environmental Protection

### Albania

The National Government has final decisive power and does not give high priority to environmental problems. The Committee for Environmental Protection (CEP) is only a department of the Ministry of Health and has no independent status. Its influence on national decision-making is limited.

The Municipal Government of Tirana has an Environmental Office which is involved in the solution of urban environmental problems. However, they have no decisive power in the implementing of environmental policy. The establishment of an Environmental Office within the Municipality of Tirana seems to be more of an unofficial personal achievement of certain individuals than an official, accepted structure for all local authorities.

Research Academies do not have much influence and are mainly passive. They are sometimes asked by the CEP for advice and personal experience. Scientists are not organized as an interest group, but act as individuals. However, many scientists are NGO members.

Environmental NGOs role in the environmental decision-making process is very limited. The position of the environmental NGOs seems even to have dropped since the political changes. NGOs (especially the Association for the Preservation and Protection of the Natural Environment of Albania "PPNEA" and the Biologists Association) are regularly asked for advice by the CEP. Some NGO actions were successful in influencing governmental decision and sometimes they received broad support from the public. Some PPNEA members are journalists, working on environmental documentaries. Although PPNEA started to make TV programs only recently they believe that those programs reach many people.

### Bulgaria

The National Government is probably having the strongest influence on environmental decision-making. It controls the large majority of funds allocated for environmental protection, makes environmental policy and proposes environmental law. The impact of local governments is limited by their lack of revenue sources and the fact that they do not yet have the needed legal authority.

NGOs and Scientists are having an impact on environmental decision-making, though it is probably less now than it was directly after the initial political changes in Bulgaria. Up to and at that time the environment was used as a platform for criticizing the previous system. Now, however, people have other priorities and the environment has fallen far on the agenda. NGOs and scientists are successful, however, at carrying out educational and training courses, and becoming involved in EIAs.

The Media could potentially play a significant role in environmental decision-making but it still tends towards sensationalism and does not always present the facts.

Trade Unions, especially the mining union, are quite strong and usually have negative impacts on environmental decision-making.

### Croatia

As there is no clear environmental decision-making process, it is difficult to say, which interest groups have a dominant impact. There are some small groups trying to impose their anti-environmental interests (nuclear energy lobby, waste import, dirty technologies etc.). But so far their impact is limited.

The national and local governments are having the greatest impact. However, there is a need for a separate MoE. Local governments have the biggest impact on local issues such as waste management and urban transport.

Academics are not as involved as they should be in the decision-making process. There are good experts and research institutions, but cooperation among them is poor and their capacities are quite under-utilized.

Environmental NGOs need to play a stronger role and should have a greater impact on the decision-making process. Now there influence is more on the personal level. The NGOs which organize for special actions and local issues can have a larger impact. The NGO's influence is limited because the public has lost the interest in environmental issues. Other limiting factors are: the lack of funding, organizational skills, and education.

Business and Industry are having an increasing impact. They have the money and it is difficult to control and influence them. However, industry is still mostly state controlled in Croatia. In the long term, privatization could be beneficial for the environment, if combined with effective legislation and enforcement.

### Czech Republic

National and local governments. The MoE formulates and implements national environmental policies. Generally, however, the Government is more concerned with the economy and does not make too much effort towards directing action in environmental issues. There is a tendency to consider environmental protection as an issue that can be solved only when the economy is strong enough. Local Government has power and responsibility in different areas but there is too little money for the realization of certain projects; sometimes strong lobbying for local development impedes adequate consideration of environmental concerns.

Academia and Science are having a weak influence on the environmental decision-making process.

Environmental NGOs have considerable influence on environmental decision-making with regard to some specific, local issues (sometimes they can mobilize public and/or media pressure), but limited impact on issues relating to environmental policy. They have generally been criticized for their inadequate efforts which were described as poorly coordinated and not visible enough. This situation seems to be slowly improving. Their influence is often not as strong as it could be and they still are not demanding too much.

The business community is becoming increasingly more influential in the environmental decision-making process. Some experts think that the growing strength of the economic lobbies will possibly have negative impacts on the environment. However, there is growing interest among companies in improving their individual environmental policies as well as in integrating environmental concerns into the national economic policy in a practical and feasible way.

The Media has considerable influence but reports focus mainly on "hot stories" with a tendency towards sensationalism. The main approach is popular. There is insufficient coverage of the real issues and of reporting about positive and constructive examples of environmental protection.
HUNGARY

PARLIAMENT and GOVERNMENT. The leaders of the country are torn between protecting jobs at derelict factories and shutting them down for economic (not environmental) reasons. Albeit the most powerful group in environment protection is the Government, this power is relatively low. Relations between the Parliamentary Committee on Environment and the MoE were strategically valued, while the Committee was not particularly divided along party lines.

The PUBLIC is mainly interested in obvious environmental harms such as some types of air pollution or drinking water contamination. Low environmental awareness is behind the failure of the few efforts for selective waste collection. The development of consumption patterns clearly works against the environmental interest.

The MEDIA is generally not meeting its possibilities or responsibilities in raising environmental awareness. A small group of journalists tries to keep environment on the agenda. However reports often rely on sensationalism instead of presenting positive solutions to common problems.

ENVIRONMENTAL NGOs should re-define their role. Some organizations have invaluable experience and are capable of consulting work now. Cooperation between all interest groups, especially at the local level, should have priority.

POLAND

The NATIONAL GOVERNMENT was most often cited as having the largest impact on environmental decision-making. With important institutions like the State Environmental Inspectorate, it remains an important player despite increased decentralization of authority.

LOCAL and REGIONAL GOVERNMENTS are increasingly charged with environmental responsibilities. At this level environmental policy is implemented, permits issued, standards negotiated and facility sites approved. The growing significance of local and regional governments brings mixed blessings as some governments give environmental issues high priority while others do not.

BUSINESSES and INDUSTRY were often mentioned as having great impact on decision-making, largely for the worse. Because of the current pervasive public concern for economic growth and employment security the influence of businesses has strengthened markedly. Now the environment is very low on most agendas and business interests are capitalizing on this by influencing decision-making processes to their benefit. Businesses often resist environmental protection measures first of all because they are able to, and secondly because they are viewed merely as a drain on profits.

TRADE UNIONS were also mentioned as having significant influence, again with negative results for the environment. The lobbying efforts of trade unions keep precious resources flowing to inefficient sectors badly in need of restructuring, which in turn hampers the mobility of labor and capital which could be better used in other areas, including environmental protection.

NGOS and the MEDIA were noted for having very important and evolving roles to play. Currently, however, they are reported as relatively weak and requiring strengthening in order to fulfill their potentials. The media was acknowledged as potentially having strong influence but was criticized as being inconsistent and unprofessional.

SLOVAK REPUBLIC

NATIONAL and LOCAL GOVERNMENTS. Environmental decision-making is mainly directed at the national level by the state administration and Government. At the local level, environmental authorities have the most influence, often, by a wide margin (and usually together) as having the greatest impact on environmental decision-making. Both are very active in publicizing environmental issues and promoting environmental education.

NGOS and ACADEMICS play a role in Slovakija, unfortunately however, they aren’t concerned much with environmental awareness and education.

NGOS and ACADEMICS play a role in environmental protection, but they don’t have much power and influence. The public is now less inclined to accept the NGOs opinions than they were 4-5 years ago. The influence of academia as a whole has diminished because of a lack of money. Also, NGOs with professional knowledge are facing insufficient financial support and are weakening. The amount of official support (State budget) for NGOs has decreased steadily since 1991 and only a few NGOs are still being supported.

ROMANIA

The NATIONAL and LOCAL GOVERNMENT are almost certainly having the greatest impact on environmental decision-making. The national government is responsible for initiating environmental policy and law, and local and regional governments are primarily responsible for implementing those policies and laws.

PARLIAMENT is having significant influence, in a negative sense, with its failure to enact a new environmental protection law.

ENVIRONMENTAL NGOs’ influence on environmental decision-making is growing, but remains relatively low. To some extent this depends on the individual organization, as some include highly qualified experts while others are lacking specialists.

The MEDIA’s influence in this field is also growing. They are now free and uncensored and able to distribute information quickly to many people.

SCIENTISTS have some influence through their research and ability to recommend standards and various policy options, however, their role is limited in part because of the poor coordination and distribution of the results of their work.

INTERNATIONAL INSTITUTIONS such as the World Bank, the EC and the European Bank for Reconstruction and Development also have notable influence through the conditions they attach to grants and loans given to the government as well as policy advice they provide.

The public is now less inclined to accept the NGOs opinions than they were 4-5 years ago. The influence of academia as a whole has diminished because of a lack of money. Also, NGOs with professional knowledge are facing insufficient financial support and are weakening. The amount of official support (State budget) for NGOs has decreased steadily since 1991 and only a few NGOs are still being supported.
SLOVENIA

National and local governments play major roles. The national government has the strongest role in determining environmental protection policy. The MoE is pushing most substantially for environmental interests, but its impact is limited by other, mostly economic, interests. There is an increasing impact from the local government as well.

Academics do not have enough influence. The decision-making system is not taking into consideration the opinion of a wider group of experts. Usually, experts working in the institutes belonging to the ministries have more impact.

NGOs and the media do not have a very strong impact. The NGO movement is being restructured now and new NGOs are forming. Their role is expanding, however. The media generally plays a positive, albeit weak, role.

Parliament has a limited role and its decisions are sometimes difficult to implement due to political problems.

Political greens provided a certain alternative during the last government but they could not put into practice what they promised.

Businesses have a strong and increasing influence. There is an element of the business community which is internationally oriented and is coping with European standards and thus plays a positive role in improving the environment.
Appendix 1: List of Interviewed Experts

ALBANIA

Arben CICO
Head of Economic Department and Sectoral Analysis Department, Ministry of Finance.

Leke GJIKNJURI
Chairman Protection and Preservation of Nature and Environment (PPNEA).

Baki HOXHA and Petraq KRASAFILLAKU
Safety and Environmental Department, Ministry of Energy and Mineral Resources.

Shaban KAMBERI
Chief Environmental Office, Municipality of Tirana City.

Alexander KOLACI
Head of Department of Plant Protection, Ministry of Agriculture and Food.

Sokol KONGOLI
Office of Tourism Policy, Ministry of Tourism.

Fatos LULO
Member Committee for Environmental Preservation and Protection, Lawyer.

Pascal MILO
Member of Parliament; Deputy Chairman of Social-Democratic Party; Chairman Committee for Education, Science and Social Problems.

Etheni RUKA
Member of Parliament; member of Socialist Party, member Committee for Education, Science and Social.

Lirim SELFO
Chairman Committee for Environmental Preservation and Protection (within the Ministry of Health).

Jani VANGJELI
Director of the Institute of Biological Research, Faculty of Natural Science, University of Tirana.

BULGARIA

Ada BAINOVA
Professor of environmental toxicology; Board Member of the Environmental Management Training Center; Member of the Environmental Advisory Council to the European Bank for Reconstruction and Development

Venko BESCHKOV
Bulgarian Academy of Science; former Deputy Minister of Environment.

Simeon BOZHANOY
Environmental Advisor to the President of Bulgaria

Ivan FILIPOV
Director of EC PHARE Program in Bulgaria.

Oreola IVANOVA
Director of International Cooperation at the Ministry of Environment

Dimitar MANDADJEV
President of the National Water Council.

Kliment MINDJOV
President of Borrowed Nature Association.

Belin MOLLOV
Head of Department of Territorial Administrative Structure and Local Authority, Ministry of Regional Development and Construction; member of Sofia City Council.
Pencho PENCHEV  
Professor at the University of National and World Economics; Vice-President of the Institute for Sustainable Development (Sofia)

Elena PETKOVA  
In-country Coordinator for the Environmental Training Project of the University of Minnesota; In-country Representative of the Institute for Sustainable Communities, Vermont.

Evgueni POPOV  
Consultant on market instruments and environmental issues; Coordinator of Environment and Sustainable Development Project of University of Minnesota.

Michail STAINOV  
Head of the Populated Areas Department, Ministry of the Environment of Bulgaria.

Krassen STANCHEV  
Director of the Institute for Market Economies.

Antoni TONCHEVSKI  
Assistant Professor at the Institute of Chemical Technologies; in-country coordinator for Community Based Environmental Project of Ecoglasnost, held by the Institute for Sustainable Development, Vermont USA.

CROATIA

Damir BRLEK  
Environmental Inspector, Ministry of Civil Engineering and Environmental Protection.

Boris CAVRAK  
INA Oil Industry.

Paula DURBESIC  
President, Croatian Ecological Society; Department of Zoology, University of Zagreb.

Franjo GASPAROVIC  
Environmental Economist.

Goran GRANIC  
President, Parliamentary Committee for Environmental Protection.

Duro HUBER  
Croatian Ecological Society, Member of the Board; University of Zagreb, Faculty of Veterinary.

Valerija KELEMEN-PEPEONIK  
Head of Section for Environment, City Bureau for Development Planning and Protection of Environment, Assembly of the City of Zagreb.

Zdenka KONRAD  
Scientist, Institute "Ruder Boskovic".

Vladimir LAY  
President, Green Action, Zagreb.

Roman NOTA  
Ministry of Economy

Inge PERKO-SEPAROVIC  
Professor, Faculty of Political Science; President, Green Alliance.

Viktor SIMONCIC  
Vice Minister, Ministry of Civil Engineering and Environmental Protection.

CZECH REPUBLIC

Martin BRANIS  
Director, Institute for Environmental Studies, Faculty of Science, Charles University.

Fedor BRUOTH  
Deputy Director, International Relations Department, Ministry of the Environment of the Czech Republic.
Milan CAHA  
Director, National Center for Environmental Education.

Antonin KMENT  
Chairperson, Commission of the Environment of the Union of Towns and Communities.

Miroslav KOTASKA  
Head of the Group for Foreign Contacts, International Relations Department, Ministry of the Environment of the Czech Republic.

Eva KRUZIKOVA  
Executive Director, Institute for Environmental Policy

Radomir MATYAS  
President, Czech Environment Management Center.

Bedrich MOLDAN  
Director, Center for Environmental Scholarship, Charles University; former Minister of the Environment of the Czech Republic.

Ales SULC  
Deputy Minister Responsible for Nature and Landscape Protection, Ministry of Environment of Czech Republic.

Josef VAVROUSEK  
Chairman, Society for Sustainable Development; Director, Human Ecology, Faculty of Social Sciences, Charles University; former Federal Environmental Minister of Czechoslovakia

Ivan ZIKA  
Environmental Advisor to the Management and Head of the Environmental Division, Spolana a.s. chemical plant.

Milan ZEZULKA  
Landfill specialist, Waste Management Department of the Czech Inspection of Environment Protection.

**HUNGARY**

1st series (pilot study)

Arpad BAKAY  
Chairman of the Board, Hungarian Power Companies Ltd.

Gyula BANDI  
Scientific Director, Copernicus Environmental Law Program in the Danube Region, ELTE University Faculty of Law,

Katalin CSORBA  
Director, PHARE Program, Ministry for Environment and Regional Policy

Peter FARKAS  
Chairman Environmental Committee, Christian Democratic Party

Zoltan ILLES  
Adviser, Commission of the European Communities Delegation in Budapest

Laszlo JANOSSY  
Environmental Manager, National Institute of Hygiene, Environmental Hygiene, Water Department

Mihaly KADAR  
National Institute of Hygiene

Sandor KEREKES  
Co-Director Head of Department, Hungarian Center for Conflict Resolution, Training and Research University of Economics

Robert KISS  
Member of Parliament, Deputy Chairman Committee of the Environment Parliamentary Office

Vilmos KISZEL  
Honorary President, Göncöl Alliance
Miklos KOLOSZAR
Chief Counsellor for Environment, Ministry of Finance

Endre KOVACS
Head of Department, Institute for Environmental Protection

Karoly MARIALIGETI
ELTE University, Department of Microbiology

Miklos POOS
Deputy Head, Department of Energy Strategy, Ministry of Industry and Trade

Nandor ROTT, MP
Chairman, Committee of Environmental Protection

Harri SUOMINEN
Managing Director, Tetra Pak Hungaria

Judit VASARHELYI
Executive Director, Independent Ecological Center

Zoltan VERRASZTO
Director Central Danubian Environmental Inspectorate

Elek WOYNAROVICH
Project Officer, Ministry for Environment and Regional Policy, PHARE Environmental Unit

2nd series

Peter FATH
Executive Director, American Chamber of Commerce in Hungary

Zsuzsa FOLTANYI
Environmental Partnership

Peter KADERJAK
Budapest University of Economics, Department of Business Economics

Attila KEMENY
Permanent Secretary, Ministry of Environment & Regional Policy

Istvan TÖKES
Head of the Department for International Cooperation & Information, Ministry for Environment & Regional Policy

Jozsef VARGA
Director, Institute for Environmental Protection (KGI-KVI)

FORMER YUGOSLAV REPUBLIC OF MACEDONIA

Biljana ALEKSIEVSKA
Horticultural engineer in the firm "Parks and Vegetation"

Georgi CHEPUINOVSKI
Economists specializing in environmental issues at the University of Skopje

Beba DJEKOVA
Architect responsible for environmental protection on the Skopje City Commission for Urbanism, Traffic and Environment

Kostadin GREKOVSKI
Doctor of medicine specializing in occupational health; currently a health and sanitary inspector for the Ministry of Health

Aleksandar GRIZO
Chemical engineer; formerly a professor in the Technology Department of the University of Skopje
Ljupcho GRUPCHE
Biologist specializing in ecology; President of the Macedonian Society for Professional Ecologists; Expert Advisor to the Parliamentary Committee on the Environment

Ivan ILJEVSKI
Technical manager responsible for environmental protection at the cement plant "Usje"

Tomislav IVANOV
Geologist; formerly a professor in the Technology Department of the University of Skopje

Toma KARAMIHA
Forestry engineer at the Ministry of Agriculture, Forestry and Waters

Kostadina KORNETI
Medical doctor and professor at the University of Skopje

Aleksandar NASTOV
Senior Advisor for Ecology at the Ministry for Urbanism, Civil Engineering, Traffic and Ecology

Pece NEDANOVSKI
Economists specializing in environmental issues at the University of Skopje

Toma NICOTA
Mechanical engineer at the "IPIS" engine factory specializing in engine emissions

Liljana ONCEVSKA
Architect responsible for environmental protection on the Skopje City Commission for Urbanism, Traffic and Environment

Lazo PEKEVSKI
Physicist at the Seismological Observatory at the University of Skopje

Jaglka SILJANOVSKA
Civil engineer; sanitary and health inspector for the Ministry of Health

Vlado SPRIDONOV
Physicist specializing in air pollution modelling at the Hydro-meteorological Institute

Nikola SRBINOVSKI
Agricultural/forestry engineer; Deputy Minister for Ecology at the Ministry for Urbanism, Civil Engineering, Traffic and Ecology

Mihail TOKAREV
Architect at the University of Skopje specializing in the protection of the cultural and historical environment; Expert Advisor to the Parliamentary Committee on Environment; former President of the Macedonian Ecological Movement

Josif TANEVSKI
President of the Macedonian Ecological Movement; owner and manager of a laboratory and pharmacy supply firm

Trajko TRAJKOVSKI
Architect specializing in noise and heat isolation; creator of several television programs on energy efficiency

Gordan VELJANOVSKI
Deputy Minister for Forestry in the Ministry of Agriculture, Forestry and Waters

Milos ZMEJKOVSKI
Hydrologist and professor of ecology at the University of Skopje; Vice President of the NGO "Opstanok".

POLAND

Leszek BANASZAK
Director, Foreign Cooperation Department of the Ministry of Environmental Protection, Natural Resources and Forestry.
Wojciech BEBLO
Director, Katowice Province Department of Environmental Protection; member of the European Bank for Reconstruction and Development's Environmental Advisory Council; member of the Katowice City Council.

Przemyslaw CZAJKOWSKI
Board Member, Center for Environment and Development.

Radoslaw GAWLIK
Member of the Polish Parliament since 1989; Vice-chairman, Parliamentary Commission for Environmental Protection; Chairman of the Democratic Union's Ecological Fraction.

Maria GUMINSKA
Professor of Bio-chemistry, Medical Academy of Jagiellonian University; Vice-President, Polish Ecological Club; Member of Poland's Presidential Environmental Advisory Council.

Andrzej KASSENBERG
President, Institute for Sustainable Development Warsaw; Chairman of Poland's Environmental Impact Assessment Commission; Member of Poland's Presidential Environmental Advisory Council; Member of the Polish Ecological Club.

Stefan KOZLOWSKI
Environmental Advisor to the President of Poland; former Minister of Environmental Protection, Natural Resources and Forestry; Professor, Institute of Geology in Warsaw.

Jerzy KWIATKOWSKI
Director, Project Implementation Unit of the Ministry of Environmental Protection, Natural Resources and Forestry.

Maciej NOWICKI
President, ECOFUND Foundation; former Minister of Environmental Protection, Natural Resources and Forestry.

Grzegorz PESZKO
Cracow Group of the Green Federation, Doctoral student at the Cracow Academy of Economics.

Tomasz ZYLICZ
Professor of Environmental Economics, Warsaw University; Advisor to Poland's Ministry of Environment; Member of the ECOFUND Supervisory Board.

ROMANIA

Nicolae BOTNARIUC
Professor of Ecology at the Romanian Academy; President of the Nature Conservation Commission

Mircea CIUMARA
President of the Parliamentary Commission for Ecology; Director of the National Institute for Economic Research

Valentina ENE
Industrial chemical engineer responsible for environmental issues at Celulosys and Paper Company

Klaus FABRITUS
Vectors Control Unit Chief at the Hygiene and Public Health Institute; Vice-President of the NGO "Environment and Nature Protection Association"

Dan FLORESCU
Director of the Currency Operations Division of the National Bank of Romania

Ica GIURGIU
Vice-President of the National Youth Tourist Club

Lascu ILIE
Prefect of Braila County; Member of Parliament

Cristina IOAN
Expert in the Ecological Research and Development Division at the Ministry of Industries

Ioan JELEV
Secretary of State, Department of Environment Protection
Paul LIZAC  
Director of the Bucharest Environmental Protection Agency

Gheorghe MANEA  
Environmental specialist at the National Institute for Economic Research; member of the academic NGO "Romanian Association for Ecological Management and Sustainable Development"

Dan MANOLELI  
Associate Professor of Taxonomy at the Faculty of Biology; President of the "Ecological Group of Cooperation," and Expert Advisor to the Parliamentary Commission on Environment

Bogdan PARANICI  
Coordinator of the NGO Danube Forum; Program Manager for the Ecological Youth of Romania

Istvan SIDO  
Environmental section coordinator for the AIDRom Foundation; Vice-President of the NGO "Rhododendron"

Nicolae TONIUC  
Senior Researcher at the Institute of Biology; Scientific Secretary of the Nature Monuments Commission

SLOVAK REPUBLIC

Mary ARNDSTEN  
Legal Advisor, Ministry of Environment of Slovak Republic.

Peter BENUSKA  
Deputy Mayor and Chief Architect of Bratislava; member of the European team of the International Council for Local Environmental Initiatives (ICLEI).

Miroslav BOHUS  
Department for Ecological Conservation, Comenius University.

Robert BRENAK  
Ministry of Environment of Slovak Republic.

Robert FICZO  
Member of the Slovak Parliament; member of Constitutional Committee.

Daniel GEISBACHER, Alojz PETRIK, Roman BIEL, Mr. LOBODA  
Responsibles in the Departments of Water Pollution and Air Pollution, Slovak Inspection of Environment.

Mikulas HUBA  
Researcher, Institute of Geography, Academy of Science; Chairman, Society for Sustainable Living in Slovak Republic; former member of the Slovak Parliament and Chairman of the Parliamentary Committee for Environment.

Lubos HRIVNAK  
WWF Environmental Education Programs Coordinator, Strom Zivota Bratislava.

Ladislav MIKLOS  
Landscape ecologist, Academy of Science, Bratislava; member of the External Advisory Board of the President of Slovak Republic; member of the presidium of the Slovak Commission of UNESCO; former Deputy Minister of the Slovak Commission for Environment.

Vlasta PASTUSAKOVA  
Air Protection and Wastes Manager, SLOVNAFT chemical factory, Bratislava.

Jozef SKULTETY  
Head of the International Relations Department, Ministry of Environment of Slovak Republic.

Elena VARTIKOVA  
International Coordinator of GREENWAY.

Lubomira ZIMANOVA  
State Secretary, Ministry of Environment of Slovak Republic.
SLOVENIA

Bostjan ANKO
Biotechnical Faculty, University of Ljubljana.

Fedor CERNE
PRO-ECO, Management Consulting, Ljubljana.

Jorg HODALIC
Director, Institute of Environment and Water Management, Ministry of Environment and Regional Planning.

Andrej KLEMCN
Slovenian E-Forum, Ljubljana.

Mojca LOGAR
Adviser of Kamnik, Secretariat for Environmental Protection and Urbanism.

Andrej LUKSIC
Researcher, Center for Political Science, University of Ljubljana.

Zarko PREGELJ
Chairman, Parliament Comity for the Environment.

Joze SAMU
Chief Inspector, Inspectorate of Health.

Leo SESERKO
Member of Parliament.

Jernej STRITIH
Deputy Minister of Environment, Ministry of Environment and Regional Planning.

Stojan TRAMTE
Junior Legal Adviser, Agency of Privatisation.

Gorzad TRPIN
Director, Institute of Public Administration, University of Ljubljana.
Appendix 2: Questionnaire

Political, Economic and Social Impacts on Environmental Protection at the Spring of 1994

1. Which political, economic and social changes in the past five years have been crucial in influencing the state of the environment in your country?

Assessment of Environmental Assets and Damages

2. Can you give concrete examples where it is currently a priority to protect environmental assets and natural capital in your country? What are the foremost environmental threats endangering economic development, human health and living conditions (respectively)?

Priority Environmental Problems

3. Based on your personal expertise and experience what would you list as the priority environmental problems facing your country?

Critical Steps to Start or Continue Environmental Improvements

4. What are the most important areas to be strengthened in order to solve the priority environmental problems mentioned above (i.e. environmental policy, management, law and enforcement, training, education, technology, services, others)?

Driving Forces for Environmental Improvement and Degradation

5. What currently are the driving forces for change in the state of the environment in your country?

Integration of Environmental Protection and Economic Development

6. What are the main obstacles to integrating environmental protection and economic development? Are measures planned to make improvements in these areas?

Financing Environmental Improvements

7. Can you give a short overview of existing and proposed financial mechanisms for environmental protection in your country?

International Cooperation

8. Have there been environmental successes in your country where CEE cooperation was instrumental? Could you list issues where CEE cooperation would be very helpful?

Western Assistance

9. Have there been successes in environmental protection in your country where foreign assistance was instrumental? Do you know of negative experiences with western technical and financial assistance in the environmental field in your country? What form should western assistance take?

Interest Groups in Environmental Protection

10. Which of the following: national / regional / local governments, legislative bodies, businesses, scientists, NGOs, the media, or others, is having the largest impact on environmental decision-making in your country?
As the countries of Central and Eastern Europe progress through fundamental political, economic and social changes, their citizens face an unprecedented period of transformation and uncertainty. It is clear, however, that the prospects for successfully adapting to these changes and for achieving economic prosperity and social welfare rest squarely on the shoulders of these same citizens. Similarly, the task of creating and maintaining a natural environment that can sustain such prosperity and welfare must be undertaken by those people who actively use and are directly affected by the environmental conditions of the region. This Strategic Environmental Issues Report brings together and illuminates the perspectives, experiences and outlooks of many of those individuals from the region who have made strong personal and professional commitments to shaping its development.