





INVESTING IN PEOPLE AND INSTITUTIONS THAT MAKE ENVIRONMENTAL LAWS WORK

June 2007







 $\ensuremath{\texttt{@}}$ 2007 The International Bank for Reconstruction and Development/The World Bank

1818 H Street, NW

Washington, DC 20433 Telephone: 202-473-1000

Internet: www.worldbank.org E-mail: feedback@worldbank.org

All rights reserved.

This volume is a product of the staff of the International Bank for Reconstruction and Development/The World Bank. The findings, interpretations, and conclusions expressed herein are those of the authors and do not necessarily reflect the views of the Board of Executive Directors of the World Bank or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work.

Rights and Permissions

The material in this publication is copyrighted. Copying and transmitting portions or all of this work without permission may be a violation of applicable law. The International Bank for Reconstruction and Development/ The World Bank encourages dissemination of its work and will normally grant permission to reproduce portions of the report promptly.

For permission to photocopy or reprint any part of this report, please send a request with the complete information to the Copyright Clearance Center, Inc., 22 Rosewood Drive, Danvers, MA 01923, USA; telephone 978-750-8400; fax 978-750-4470; http://www.copyright.com/.

All other queries on rights and licenses, including subsidiary rights, should be addressed to the Office of the Publisher, The World Bank, 1818 H Street NW, Washington, DC 20433, USA; fax 202-422-2422; email at pubrights@worldbank.org.

This report is also available online at: http://www.worldbank.org/eca/westbalkansenv.

Design by Circle Graphics, Inc.

Cover Photo Sources: Denisa Bilali, Andrea Bevanda Hrvo, Ana Gjokutaj

Contents

Ack	nowledgments	vi
Abb	reviations and Acronyms	iz
Exec	cutive Summary	X
1	Why Adopt the Environmental Acquis?	1
	What Are the Key Challenges?	4
	Natural Assets	6
	Air Quality	10
	Solid Waste Management	11
	Form and Functions of Government	12
	Environment Protection Agencies—A Useful Model?	18
	Governance and Environmental Enforcement	19
	Public Administration and Staffing	23
	Public Participation	25
	Legal Harmonization and Planning	26
	Environmental Financing	30
	International Cooperation	32
2	Lessons from CEE Countries	35
	Lessons from CEE Experience	35
	Transposition Strategies	36
	Institutional Reforms	38
	Coordination Mechanisms and Intra-Government	
	Communication	42
	Human Resources	44
	Public Participation and Awareness	46
	Data Management/Monitoring and Evaluation	48
	Environmental Financing/Resource Flows	48
	International Cooperation	50
3	w n 1 1 10 1 1	
	Key Recommendations and Conclusions	5]
	Overview	52
	Transposition Strategies	54
	Institutional Reforms	55
	Coordination Mechanisms and Intra-Government	
	Communication	57
	Human Capacity and Resources	57
	Public Participation and Awareness	58

	Data Management/Monitoring and Evaluation	59
	Environment Investment Financing/Resource Flows	59
	International Cooperation	60
A P P	ENDIX	
A	EU Environmental Legislation	63
	List of Environmental Legislation Covered by	
	Progress Monitoring	63
	2. Key Environment Legislation with Links to Trade	65
	3. Key Environment Legislation Linked to Industrial	
	and Technology Upgrades	66
	4. Key Environment Legislation Relating to	
	Transboundary Cooperation	66
В	Summary of Tools and Methods for Assessment of	
	Environmental Capacity	67
	EU Recommended Minimum Criteria for Environmental	70
	Inspectorates (RMCEI)	79
D	List of SEE Government Institutions with Competence	
	for the Environment	83
E	Central and Eastern Europe (CEE) Case Studies	89
Е	Contain and Lactorn Lattope (G2L) Gate country	0,5
	Examples of CEE Countries With No Specified EPA	
	for Regulatory Functions	107
G	List of University and Post Graduate Programs	
	for Environment Available At SEE Universities	109
П		
•	Eurostat Definition of Environmental Protection	
	Expenditure (EPE)	111
	Review of Environment Funds in CEE Countries	113
Ţ	Staff and Institutional Changes in Environmental	
	Institutions in CEE Countries	119
1/_		11)
	Survey Methodology	125
D .		
Refe	erences	127

Contents

Tables

1.1	Relations with the EU	4
1.2	Populations and Land Areas	5
1.3	Agriculture and Forests	6
1.4	Water Supply and Wastewater Infrastructure	8
1.5	Levels of Industrialization	8
1.6	Progress with Enterprise Privatization and Restructuring	9
1.7	Air Pollution	11
1.8	Key Government Functions under Environment Acquis	14
1.9	State Level Institutions with Environment Competence	15
1.10	European Environmental Ministries—Policy Areas	17
1.11	Staffing in Key Environment Institutions Across the Region	24
1.12	State of Transposition of EU Environmental Legislation	
	as of mid-2007	28
2.1	CEE Government-Wide Institutional Reforms	40
3.1	Summary of Recommended Reform Objectives	52
Figu	ıres	
		_
1.1	Diverse Income Levels	5
1.1 1.2	Macroeconomics at a Glance	5
1.1 1.2 1.3	Macroeconomics at a Glance Protected Areas Coverage	5 7
1.1 1.2 1.3 1.4	Macroeconomics at a Glance Protected Areas Coverage Percent Permitted Landfills	5 7 12
1.1 1.2 1.3 1.4 1.5	Macroeconomics at a Glance Protected Areas Coverage Percent Permitted Landfills Waste Generation Rates	5 7 12 12
1.1 1.2 1.3 1.4 1.5	Macroeconomics at a Glance Protected Areas Coverage Percent Permitted Landfills Waste Generation Rates Institutions with Environment Competence	5 7 12 12 16
1.1 1.2 1.3 1.4 1.5 1.6 1.7	Macroeconomics at a Glance Protected Areas Coverage Percent Permitted Landfills Waste Generation Rates Institutions with Environment Competence Composite Governance Indicators	5 7 12 12 16 20
1.1 1.2 1.3 1.4 1.5 1.6 1.7	Macroeconomics at a Glance Protected Areas Coverage Percent Permitted Landfills Waste Generation Rates Institutions with Environment Competence Composite Governance Indicators Government Effectiveness and Rule of Law Indicators	5 7 12 12 16 20 21
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8	Macroeconomics at a Glance Protected Areas Coverage Percent Permitted Landfills Waste Generation Rates Institutions with Environment Competence Composite Governance Indicators Government Effectiveness and Rule of Law Indicators Public Sector Wage Spending	5 7 12 12 16 20 21 23
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9	Macroeconomics at a Glance Protected Areas Coverage Percent Permitted Landfills Waste Generation Rates Institutions with Environment Competence Composite Governance Indicators Government Effectiveness and Rule of Law Indicators Public Sector Wage Spending Environment Staff Changes over EU Pre-Accession in CEE	5 7 12 12 16 20 21 23 24
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10	Macroeconomics at a Glance Protected Areas Coverage Percent Permitted Landfills Waste Generation Rates Institutions with Environment Competence Composite Governance Indicators Government Effectiveness and Rule of Law Indicators Public Sector Wage Spending Environment Staff Changes over EU Pre-Accession in CEE Staffing Comparison to Slovenia Core Environment Ministry	5 7 12 16 20 21 23 24 25
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10 1.11	Macroeconomics at a Glance Protected Areas Coverage Percent Permitted Landfills Waste Generation Rates Institutions with Environment Competence Composite Governance Indicators Government Effectiveness and Rule of Law Indicators Public Sector Wage Spending Environment Staff Changes over EU Pre-Accession in CEE Staffing Comparison to Slovenia Core Environment Ministry Environmental NGOs—2006	5 7 12 12 16 20 21 23 24 25 25
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10 1.11 1.12	Macroeconomics at a Glance Protected Areas Coverage Percent Permitted Landfills Waste Generation Rates Institutions with Environment Competence Composite Governance Indicators Government Effectiveness and Rule of Law Indicators Public Sector Wage Spending Environment Staff Changes over EU Pre-Accession in CEE Staffing Comparison to Slovenia Core Environment Ministry Environmental NGOs—2006 % of GDP Environment Expenditure 2004	5 7 12 12 16 20 21 23 24 25 30
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10 1.11 1.12 1.13	Macroeconomics at a Glance Protected Areas Coverage Percent Permitted Landfills Waste Generation Rates Institutions with Environment Competence Composite Governance Indicators Government Effectiveness and Rule of Law Indicators Public Sector Wage Spending Environment Staff Changes over EU Pre-Accession in CEE Staffing Comparison to Slovenia Core Environment Ministry Environmental NGOs—2006 % of GDP Environment Expenditure 2004 Share of Government Budget Allocated to Environment	5 7 12 12 16 20 21 23 24 25 30 30
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10 1.11 1.12 1.13 1.14 1.15	Macroeconomics at a Glance Protected Areas Coverage Percent Permitted Landfills Waste Generation Rates Institutions with Environment Competence Composite Governance Indicators Government Effectiveness and Rule of Law Indicators Public Sector Wage Spending Environment Staff Changes over EU Pre-Accession in CEE Staffing Comparison to Slovenia Core Environment Ministry Environmental NGOs—2006 % of GDP Environment Expenditure 2004 Share of Government Budget Allocated to Environment International Assistance to SEE Region	5 7 12 16 20 21 23 24 25 25 30 30 31
1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10 1.11 1.12 1.13 1.14 1.15 1.16	Macroeconomics at a Glance Protected Areas Coverage Percent Permitted Landfills Waste Generation Rates Institutions with Environment Competence Composite Governance Indicators Government Effectiveness and Rule of Law Indicators Public Sector Wage Spending Environment Staff Changes over EU Pre-Accession in CEE Staffing Comparison to Slovenia Core Environment Ministry Environmental NGOs—2006 % of GDP Environment Expenditure 2004 Share of Government Budget Allocated to Environment	5 7 12 12 16 20 21 23 24 25 30 30

Boxes

1.1	EU Environment Acquis Overview (Full list in Appendix A.1)	2
1.2	Bulgaria Integration of Environment in Privatization	
	Process	9
1.3	Incidents and Illegal Operations with Environmental	
	Inspectorate Involvement	21
1.4	Environmental Compliance and Enforcement Network	
	for Accession (ECENA)	22
1.5	Environment Acquis: How "Cross Compliance" Affects	
	Agriculture	27
1.6	Priority Environmental Investment Program (PEIP)	
	for South Eastern Europe	32
1.7	The Regional Environmental Reconstruction Program	33
2.1	Lithuania—Striving to Implement Water and	
	Waste Investments	38
2.2	Establishing Capacity Needs for EU Nature Conservation	
	Regulations	39
2.3	Trial and Error of Institutional Reforms—Romania	41
2.4	Strengthen Institutional Capacity and Public Participation	
	for EIA	41
2.5	Technical Assistance Supporting Capacity Building for IPPC	
	Directive—Latvia	45
2.6	Public Participation and Local Government Implementation	
	of Environment Acquis	47
2.7	Internet–Based Coordination and Information Sharing	
	under the IPPC Directive	48
2.8	Dedicated Institution for Investment Coordination	
	and EU Grant Financing	49
2.9	International/Sub-Regional Cooperation for Capacity	
	Building for the Environment Acquis	50
3.1	World Bank Development Policy Lending to Promote	
	Environment Reforms	54

Acknowledgments

This report was prepared by a team of World Bank staff and consultants working on environment and institutional issues within the Europe and Central Asia (ECA) Region under the leadership of Marjory Anne Bromhead, Sector Manager; and Orsalia Kalantzopoulos, Country Director. Primary authors were Karin J. Shepardson, Sr. Operations Officer (Team Leader); and Paula F. Lytle, Sr. Social Development Specialist (leadership on CEE social survey). Other contributors include Drita Dade, Projects Officer based in Tirana, Albania (contributor on Albania, Macedonia, Kosovo, and regional background sections); Zeljka Rajkovic, local consultant in Zagreb, Croatia (overall report and Croatia); Nikola Ille, Sr. Rural Development Specialist based in Belgrade, Serbia (contributor on Montenegro and Serbia); Mirjana Karahasanovic, Operations Analyst based in Sarajevo, Bosnia and Herzegovina (contributor on Bosnia and Herzegovina); Bekim Imeri, Social Scientist in Skopje, Macedonia (contributor on Macedonia); and David Smith, consultant (contributor on Albania). Administrative support has been jointly provided by Dubravka Jerman, Sarah Leigh Hammill, Andreja Zelenkovic, Lisa Fonick and Ljiljana Boranic. Final editing was done by Bonita Brindley. The Regional Environment Center was contracted to conduct the background review on the experiences of Central and Eastern European States with key team members being Mihail Dimovski (team leader), Wioletta Szymanska, Ruslan Zhechkov, Oreola Ivanova-Nacheva, and Helen Russell (Golder Associates sub-contractor).

This work was initiated as the result of early collaboration with European Union staff then responsible for the West Balkans, including Andrew Murphy, Carmen Falkenberg-Ambrosio and Anna Bobo Remijn. The authors appreciate their comments on terms of reference and sharing knowledge on EU systems and requirements. The report was peer reviewed by World Bank colleagues Gregorz Peszko and Piet Hein Van Heesewijk. Client peer review was provided by Ms. Narin Pananti from the Ministry of Environment, Forests and Water of Albania, and by Ms. Jadranka Ivanova from the Ministry of Environment and Physical Planning in Macedonia. Inesis Kiskis, Undersecretary of Environment in Lithuania, provided lessons on EU funds management.

The Bank-Netherlands Partnership Program (BNPP) supported survey work. The BNPP is an agreement between the Netherlands Ministry of Foreign Affairs (MFA) and the World Bank to provide financing under

a priority-setting framework for new projects and programs of a global and regional (GRI) nature. The Netherlands is one of two largest donors of trust fund resources to the World Bank, and is a large donor to the West Balkans region.

Abbreviations and Acronyms

Best Available Techniques

BERCEN Balkan Environmental Regulatory

Compliance and Enforcement Network

BiH Bosnia and Herzegovina

BNPP (Dutch Trust Fund) Bank-Netherlands Partnership Program

BREF Best Available Technique Reference

Documents

CEE Central and Eastern Europe
ECENA Environmental Compliance and

Enforcement Network for Accession

El Economic Instruments

EIA Environmental Impact Assessment
EPE Environmental Protection Expenditure

EU European Union

FBiH Federation of Bosnia and Herzegovina

FYR Former Yugoslav Republic
GMO Genetically Modified Organisms

HCH Hexachlorocyclohexane

IFIs International Financing Institutions
IMPEL Network for Implementation and

Enforcement of Environmental Law

IPPC Integrated Pollution Prevention and

Control

MoEMinistry of EnvironmentM&EMonitoring and Evaluation

NEPA National Environmental Protection

Agency

NEAP National Environmental Action Plan

NO2 Nitrogen Dioxide NOx Nitrogen Oxides

PCB Polychlorinated biphenyls
PCT Polychlorinated triphenyls

PEIP Priority Environmental Investment

Program for South Eastern Europe

PHARE Poland and Hungary: Assistance for

Restructuring their Economies

PL Poland

REReP Regional Environmental Reconstruction

Program

RO Romania

RS Republika Srpska

SAA Stabilization and Association Agreement
SAP Stabilization and Association Process
SAVESO II Directive on the control of major-accident

hazards involving dangerous substances

SEE Southeastern Europe

SEA Strategic Environmental Impact

Assessment

SO2 Sulfur dioxide

VOCs Volatile organic compounds

Executive Summary

During the short pre-accession period, the West Balkans will have a small window to capture the benefits available before accession when political will for reform is the highest.



he EU Acquis is driving West Balkans environment institutions to adjust to a changing legal framework, which has significant implications for the future scope and organization of their work. Institutional changes are part of a government-wide adjustment that expands the role of environmental protection, increases accountability, and demands improved communication on outputs and objectives of environment programs and investments.

During the short pre-accession period, the West Balkans will have a small window to capture the benefits available before accession when political will for reform is the highest. This small window presents a one-time opportunity to adapt institutions systematically and access additional resources, guidance, and technical assistance. Unless countries complete institutional reforms and arrangements that align with the EU environment Acquis, future investments could be wasted, misdirected, or unsustainable. Thus, the future of the environment depends on improving cooperation and sharing information to capture potential efficiencies and create synergy during the process.

The West Balkan states will benefit from improved market participation, and access to EU grant programs. Environmental benefits of adopting the Acquis include health improvements particularly reduced respiratory and waterborne diseases, reduced damage and aging of buildings, improved occupational safety, economic growth particularly linked to industrial upgrades and tourism, increased crop yields and fish stocks, lower ecological and hazardous risks, and improved quality of life. Adoption of the Acquis introduces an approach to environmental governance that creates stronger ownership and an opportunity for citizens to influence government decisions; more transparent and local responsibility for natural resources; improved project programming and planning capacity; and a more predictable legal framework for foreign and private sector investors.

Presented here are lessons from CEE experience on the same institutional reform and implementation challenges faced by the West Balkans in meeting the institutional demands of EU environment Acquis. In the CEE countries, EU accession elevated the importance of the environment. The West Balkans are far enough along in the stabilization and

¹ CEE countries surveyed include Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia

association/pre-accession process to profit from explicit advice on how to accelerate learning, reduce time-consuming experimentation, and avoid costly mistakes.

Overall, CEE stakeholders' main point was that institutional arrangements must be adopted early in the process, in parallel with fine-tuning legislation to country circumstances through implementation and learning-by-doing. Key problems included transposition planning and strategies; institutional reforms; efficiency of intra-government coordination; human capacity; public participation and stakeholder inclusion; and environmental investment financing. Their second main point was that government agencies need to understand the key links between adopting the environment Acquis and the broader EU accession agenda, in particular good governance and public participation.

Environmental Management is Integral to Good Governance

Successful environmental management spreads benefits far beyond environmental quality and infrastructure improvements. In the EU, the environment Acquis embeds principles of public participation and inclusiveness; inter-government collaboration and exchange of data; accountability and reporting, and promotes decentralization—all of which are important in good governance.² Implementing the Acquis will confer the benefits of the EU environmental framework, such as improving the quality of air, water, and soils; managing the natural and urban environments, and waste more efficiently; improving citizens' health and welfare; and upgrading technology and infrastructure that are crucial for economic development.

■ Benefits for governance: Strengthen ownership and citizens' voice in government decisions; create transparent local governance of common resources; improve capacity for investment project programming and planning; demonstrate ability to

- undertake EU member state obligations; improve decision-making and prioritization for the use of public funds; and create a legal framework that will attract foreign and private sector investors.
- Benefits to other sectors: Transform natural assets into economic drivers, e.g., tourism; improve access to agriculture subsidies and export markets; and create sustainable growth and development for future generations.

The government must establish, communicate, and enforce realistic environment policies because understanding and aligning stakeholders to achieve the multi-faceted benefits of the Acquis is the first step for implementation. Sectors such as agriculture, energy,

ENVIRONMENT ACQUISHow "Cross Compliance" Affects Agriculture

As the West Balkans harmonize agricultural policies and practices with the EU, the importance of the environment and cross-linkages with the environment Acquis must be strengthened. Cross-linkages fall primarily under the water, waste, and soils-related directives and concern water resources management, agricultural runoff and non-point source pollution, development of a code of good (environmentally sensitive) agricultural practices, soil treatment and quality, including land application of manure and wastewater sludge, and rural water, sanitation, and household waste investments.

Waste disposal practices require special attention in the agro-food processing industries, slaughterhouses, and large-scale livestock farms (i.e., pig and poultry) which often fall under the requirements of the Industrial Pollution and Prevention Control (IPPC) and Water and Waste Framework Directives. Farmer access to and eligibility for agricultural subsidies in the EU are explicitly made subject to "cross-compliance" with EU environment policies further strengthening the importance of the environment in the rural development and agriculture. EU Policy has similarly integrated support for nature protection in private landscapes under the Common Agricultural Policy (CAP) Pillar 2, starting with the 2007-13 programming period, to further integrate the environment and agriculture objectives. This will help support payments to promote more environmentally sustainable rural landscape management. Lastly, all agriculture and farm-related investments and grant programs with EU support are subject to requirements of the EIA directive.

² The term Acquis (or Acquis Communautaire) refers to the total body of EU law. During the process of EU enlargement, the Acquis Communautaire has been divided into chapters to facilitate negotiation between the EU and candidate states. The environment Acquis comprises one of the largest chapters.

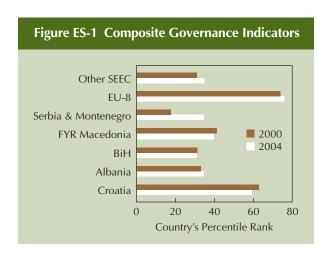
transport, industry, health, and regional development must also adhere to environment legislation because they are directly affected by it—this is known as "cross-compliance." Public and private stakeholders, including citizens, must work together to improve the environment by changing behavior and practices.

Central government

The central environment authorities' role needs to concentrate on policy making, monitoring, coordinating, and reporting because intra-government coordination and communication will be a priority, given the extensive inter-sectoral requirements of the Acquis. Information technology including environmental data collection and exchange systems must be modernized to cope with increased EU community obligations. Efficient administration of the environment Acquis has typically required consolidation of existing capacity (often spread across ministries with different levels of influence and power) and a clearer and explicit delineation of functions to avoid duplication and promote inter-sectoral work. Reforms to separate policy from regulatory functions more explicitly have often involved introduction of an environment regulatory body (agency) to achieve this.

Local government

Because the Acquis emphasizes decentralized governance structures for regulatory and service-based functions, establishing basic local-level capacity for environmental inspection, enforcement, monitoring, and control is necessary. Forms and options for this vary across Europe, ranging from environment units



EU Law Supersedes

The environment Acquis is one of the most intersectoral and far-reaching parts of the Acquis Communautaire. Unless it receives early and sustained government-wide attention to prepare institutions for implementation, it could become a bottleneck to other programs and progress.

EU Legislation is shaped jointly by the European Commission and by the EU Court of Justice. In 2002, over one third of all EU infringement cases were environment-related and a considerable number deferred questions and petitions to the European Parliament. This dynamic feedback mechanism has formed the body of environment case law that continues to grow and shape the future. EU citizens can appeal to EU law when national law fails to internalize requirements, which underscores the need to harmonize legislation carefully and prepare administrative structures for implementation *before* EU membership comes into effect.

that are fully embedded in the local municipal or country structures, to structures "deconcentrated" to the local level. Municipalities provide environmental services and must prepare for an expanded role to meet EU requirements. The most common new administrative functions relate to increased reporting, public consultations, and heavy investment planning linked to specific directive compliance. Increased delegation to local authorities for managing nature parks, and expanding wastewater and solid waste services are examples of demands that stem from the Acquis. Member states successfully used different institutional arrangements to adapt to the wide range of municipal size and capacity, allowing the larger municipalities to take on a higher level of self-management.

West Balkans states rank below the EU and CEE states on several measures for overall governance, so enhanced environmental management and enforcement requires integration with more systemic improvement in governance.

How the West Balkans Measure Up in an EU Context

Institution building is critical

The West Balkans have achieved substantial progress on transposing EU laws, but the institutional reforms required to implement the laws have not kept pace. A review of the current situation revealed a widening gap between the adoption of new environmental legislation and the institutional capacity to implement it. Environment reforms have lagged behind those in other sectors, and thus far have not been linked with key reforms in public administration, decentralization, and the judiciary. The West Balkans' limited fiscal and administrative capacities call for a phased approach that begins with building institutions capable of administering the new and existing functions demanded by environment legislation.

Local-level functions must be consolidated and strengthened

Not only are West Balkan environment administrative structures fragmented, but also regulatory and policy functions are typically located in the same institution and weak at decentralized levels. This arrangement will not adapt to the Acquis—intragovernment restructuring and strengthening of local capacity will be required. The EC does not prescribe institutional set-ups for the environment, therefore each country must review reforms in their own insti-



Environment Staffing Falls Short of Functional Needs

Albania—needs environment inspection immediately; government estimates a need to triple staff by 2015.

FYR Macedonia—functional review estimates a 35-staff deficiency; near-term needs for 123 additional staff.

Territory of Kosovo—immediate needs for environment inspectorate; facing government-wide staffing cuts that will undermine efforts to build a strong cadre of environment professionals.

Bosnia and Herzegovina—functional review reveals a systemic under-filling of government-approved environment positions "to the point where legal obligations become meaningless."

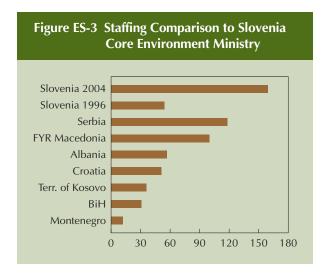
tutional context—fiscal realities, current public administration reforms, capacity, and performance to meet existing functions. To minimize costs, early reforms should create space for new functions by consolidating those that are either duplicated or outdated. West Balkan countries' environment competence within government is more fragmented than that of CEE countries.

The level of fragmentation in the West Balkan environment institutions was compared with that of CEE states with a fragmentation index.³ Higher numbers indicate more fragmentation, which could mean further potential for consolidation, intra-government coordination, and budgetary savings if duplicated staffing functions were identified.

More staff required

The heavy public sector in the Balkans will eventually require considerable fiscal and reform pressures to reduce overall government staffing. However, immediate staff reductions would hamper environment institutions' ability to comply with the environment Acquis—they will need substantial staff increases to cope with the substantial Acquis-related administrative work.

³ The number of environment institutions outside of the core environment Ministry divided by the number of environment institutions reporting to core environment Ministry.



Decentralization

All countries face large decentralization challenges, and in practice, most have not substantively decentralized environment functions. Macedonia, Kosovo, and Albania have accomplished the most and have passed legislation to devolve some environment functions to the local level however, local governments' capacity to carry out these functions remains uncertain.

More investment required

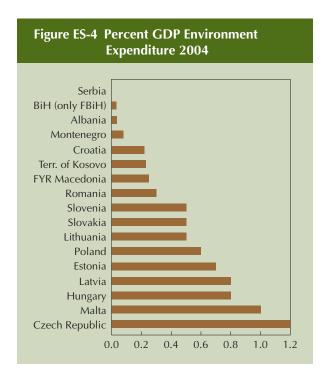
Present environment expenditures in the West Balkans as a share of GDP are well below spending in new member states. To progress, West Balkans need to start investing more of their own budget resources for the environment, particularly on building administrative capacity, allocating co-financing for investment grants, and covering the operations and maintenance costs of new investments. Careful planning, prioritization and sequencing of investments are critical. Compatibility with fiscal decentralization and municipal finance reform is needed to encourage private sector involvement and provide utilities with a clearer operating framework. Social programs should similarly be adapted to help offset utility costs to most vulnerable groups.

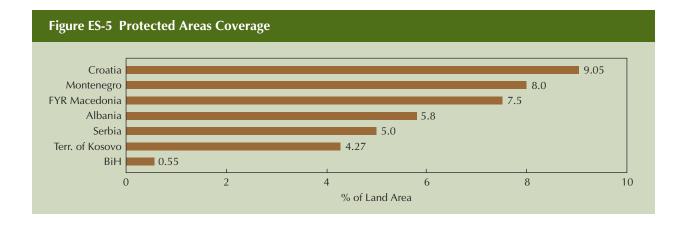
Environment funds—useful?

In the West Balkans, economic instruments in environmental protection are neither well developed nor widely applied, and most typically are seen as useful to generating revenue rather than reducing pollution. Environment funds, although common across the region, are recently established but in countries that already suffer capacity constraints, funds can absorb capacity disproportionate to their usefulness. In CEE, for example, results with environment funds were mixed and in any case, funds cannot substitute for strong state budget support for the environment. Financing heavy investments (including their operations and maintenance costs) under the Acquis will require pooling a variety of funding sources such as government budgets, tariffs/connection fees, grants, and loans.

Investment planning

High costs will necessitate prioritized investment plans well in advance of accession to accommodate compliance timetables that may extend forward a decade or two in some cases. Phasing lower-cost investments with highest early returns will reduce overall long-term costs and increase sustainability. Quality investment planning can also reduce costs, but it takes more time. Similarly, utility and municipal finance reforms can lower investment costs, and unambiguous legal frameworks will speed absorption of EU grant funds.





Environmental enforcement

The region is high in biodiversity and rich in natural resources; however, the level of protection and enforcement of sustainable use remain relatively low. Illegal or uncontrolled extraction of resources remains an enforcement challenge. Protected Areas coverage is low as a percent of territory and most countries are just introducing park management plans to help move protected areas from commitments on paper into practice. Nature protection for most of the region is closely linked with tourism potential, an important economic sector.

Water management

The region is generally water rich except in some arid island and high mountain areas. Albania generates over 90 percent of electricity supply through hydropower, and Bosnia and Herzegovina, 60 percent. However, the region is vulnerable to floods and drought and key threats to water quality are (a) lack of sewage treatment, especially in coastal areas; (b) incomplete sewage networks with high leakage and losses; and (c) industrial wastewater discharges. Water supply coverage varies across the region—most rural areas rely on individual groundwater wells. No country has advanced wastewater treatment at levels promoted by the EU environment Acquis, and all will face significant challenges in financing this level of investment.

Solid waste management

This remains a challenge to most countries, in particular the adequacy of disposal facilities. Municipal waste collection services are organized for larger cities



but rural areas have much lower collection rates. Governments have made some early progress on closing wild or illegal dump sites but this could be counterproductive if construction and upgrades to fully compliant landfills are insufficient to meet demand. Most West Balkan landfills operate without permits because they fail to meet environmental requirements, and would have a hard time adapting to EU standards.⁴

Industrial waste

Historically most industrial wastes were disposed of on-site at enterprises and regulatory oversight for water and air pollution from industry was weak. Most privatizations have proceeded with little consideration for future environmental compliance requirements, and they lack agreements on timetables for upgrading industrial pollution control equipment, or plans to

⁴ Kosovo's high percentage of permitted international-standard landfill sites is due to recent donor-supported investments.

remediate contaminated lands. Since private sector share in GDP is relatively low, except for Albania, there are future opportunities to use privatization to promote awareness of environmental compliance and investment needs.

Carbon emissions

Vehicle emissions in large cities and industrial emissions from obsolete control technologies are the main sources air pollution in the region. Carbon emissions per capita are highest in Macedonia and Kosovo; population-weighted particulate matter, linked with respiratory disease, is highest in Albania. Most countries ratified the Kyoto Protocol but have done little so far to establish implementation mechanisms for carbon trade.

Public participation

Civil society engagement and NGOs collaboration on the environment is mixed, ranging from some involvement in strategic planning working groups, to little or no involvement in the decision-making process. Historically public participation has been limited mostly to public comment periods just before government or parliament approval of policies or actions, with little experience in integrating public involvement in the early formulation of government decisions.

Environment professionals

The West Balkans has a good education system to train and educate future environmental professionals. Almost every country has at least one university or post-graduate degree program that offers environmental management, environmental engineering, ecology, environmental science, environmental protection, urban forestry, science and technology of the environment, biogeography, and environmental chemical technology.

Lessons from the CEE States

Many CEE country respondents, with the benefit of hindsight, said that they could have used the preaccession time more effectively. An earlier focus on institutional and administrative reforms would have introduced needed behavior changes more gradually, better prepared the private sector and local administrations for a new operating rules and functions, and helped candidate countries better absorb available EU grant funds.

The process of EU approximation required countries to both transpose EU legislation and establish institutional structures for implementation and enforcement.⁵ Establishing institutions posed the greater challenge for the CEE countries because institutional change was ad hoc in most countries, lacking any particular strategic or systematic approach, or was driven by factors external to environment priorities.

Countries tend to focus on transposition as the main challenge, but CEE states cautioned that capacity and coordination merit considerable attention and noted that their transposition process was often slowed by difficulties in coordinating government levels and reaching consensus. CEE countries drew attention to the advantages of having negotiators in Brussels with sufficient information vis-à-vis each directive and able to respond to changes during the process to avoid establishing unrealistic deadlines for compliance. They also stressed the importance of preparedness and good planning throughout the accession process, beginning with realistic timelines.

Almost sixty percent of CEE country respondents identified human capacity as one of the most problematic issues during pre-accession. During implementation, staff struggled through a difficult and time-consuming trial-and-error learning process. However, the unintended outcome and ultimate reward was that this process built additional capacity. Therefore, most respondents noted that human capacity became one of the greatest areas of improvement. The lesson for West Balkans is that the implementation process is an opportunity to build capacity.

In general, external stakeholder engagement improved over time but tended to be ad-hoc. Since the environment Acquis demands transparency, and requires public participation and consultations, CEE respondents recommended these tasks be an explicit responsibility. Decentralization and the new directives gave municipalities more obligations for organizing public participation, but usually without corresponding resources—staff, funding, and time.

⁵ Danish Environmental Protection Agency, "The Environmental Challenge of EU Enlargement in CEE," Thematic report, 2001.

The CEE states yielded several good practice examples of institutional challenges related to Directives or specific areas of the environment Acquis, many of which involved increased use of information technology. For example, in Czech Republic, a Web-based forum was established to exchange information and enhance dialogue among key stakeholders of the Industrial Pollution and Prevention Control Directive. In Slovakia, a dedicated documentation Centre for Environmental Impact Assessment (EIA) used the internet for public access and information exchange. Hungary's system for Natura 2000 underscored the importance of integration of a land register with habitat data using geographic information systems (GIS). Croatia, an accession candidate, is already taking this to a higher level and recently hosted a Hungarian delegation to learn more about their computer-based biodiversity inventory system. The CEE states emphasized the importance of collaboration with bordering countries and other EU partners that yielded short- and long-term benefits for both parties, and many respondents said that without support from their neighbors they might not have achieved accession.

Most challenges under the Water and Waste Framework Directive related to the organization or aggregation of services at a high-enough government level to promote economies of scale. Best economic solutions typically require inter-municipal agreements and cross-subsidization of more expensive rural services, which were typically difficult to promote without explicit central government policy intervention. Countries like Romania, that had the benefit of hindsight and more time, have embedded principles of aggregated environmental services more explicitly in their investment programs and strategies, for example, by requiring county (judet)-level Waste Management and Water Master Plans to drive investment programs and focusing more on policy reforms to enable aggregated services in practice.

Conclusions and Recommendations

The following recommendations aim to help West Balkans avoid major pitfalls in adapting to the EU environment Acquis.

1. Develop detailed plans for investment and capacity building. Transposition timetables should be reconciled to implementation financing and human capacity. This adjustment could delay full

transposition for some Directives until more funds are allocated and training programs are initiated. To underpin timetable planning, all countries should undertake a critical review of implementation and enforcement of existing environmental laws, and prepare a human capacity development strategy that integrates staffing, training, and retention policies, including at the local level. Training programs should address skill gaps in foreign languages (especially English), planning and project management, human resource management, negotiations, public consultations, investment resources, and EU rules and affairs.

- 2. Invest in basic environmental enforcement. Countries need to build and sustain credibility by investing more time and attention in basic enforcement. They need to integrate the environment into government-wide efforts to improve public administration, especially local-level environment regulatory and service provision. Countries should also strengthen the link between the judiciary and inspectorate to succeed in prosecuting more environmental cases and increasing respect for existing environmental laws.
- 3. Develop proactive public information strategies. Environment institutions should develop strategies that target a wide group of stakeholders on the requirements and benefits of the environment Acquis; this will require capacity building. For example, governments are obligated to inform owners of large-scale farms and industries that they will be required to make business investments to comply with the Acquis. Public awareness programs should stimulate behavior change among citizens so that they take more responsibility for actions that affect the environment. Additional budget funds will likely be needed to help environment institutions promote higher levels of public awareness and implement the demanding requirements of the Acquis for public participation.
- 4. **Develop institutional coordination mechanisms.**These should be developed early so that they can be tested and strengthened during harmonization. Early investments in data management tools will ease the burden of information collection and reporting and promote data sharing among staff and institutions. This will include investments to expand and extend air, water, and soil sampling,

Executive Summary **xix**

monitoring, and laboratory testing networks; and investments in computer systems and networks to integrate and connect databases spread across multiple government agencies.

Country-Specific Recommendations

- Albania. Concentrate on building local-level capacities to consolidate already advanced decentralization reforms. During early stages, strengthen capacity for fundamental legislation such as Environment Impact Assessments, emphasizing implementation. During planning, consider factors that could constrain investment timetables such as limited computer infrastructure, lower fiscal capacity, and low staffing levels.
- Bosnia and Herzegovina. Complex government structures create unique and difficult challenges but building capacity at the Entity and municipal levels will lay the foundations for sound environmental management. Bosnia and Herzegovina has the most acute gap between enforcement actions and legal requirements, and the least capacity in terms of organization and ability to enforce existing environmental laws. A focus on improving this will be important in early stages.
- Macedonia. This EU candidate state has demonstrated strengths in public participation and outreach and has comprehensive Web-sites to share information. The municipal level requires significant capacity building efforts because decentralization reforms have advanced without adequate capacity to implement the Acquis. Greater efforts on intra-government coordination are needed to ensure the needs of the environment are fully understood across government. Pre-accession working groups should consider whether perma-

- nent exchange for a are warranted, using CEE good practice examples, and including municipal stakeholders early in the pre-accession planning process.
- Serbia. This country's fragmented environmental management systems should focus early efforts on opportunities to consolidate functions during wider public administration reforms. A government-wide functional review of environment needs is recommended to identify opportunities to realize efficiency gains. Adopted legislation should be carefully assessed for implementation bottlenecks and a capacity improvement plan should focus on building practical implementation structures. Environmental investment levels in Serbia relative to GDP are among the lowest in the region, which is inconsistent with its overall fiscal standing. Hence, an increased share of own investment in environment will be expected.
- Montenegro. The smallest Balkan state faces unique capacity challenges to administer the wide agenda of the environment Acquis. If Montenegro relies too much on neighboring states it risks adopting laws and regulations that are inconsistent with local structures so it must ensure that laws, plans and strategies are integrated with local implementation structures. Strong cooperation with others, however, will be important to managing many shared natural resources.
- The Territory of Kosovo. Unique challenges include an already advanced decentralization agenda, an evolving legal status, and a weak fiscal framework. In principle, Kosovo's environment institutions were established with European Acquis in mind but the current over-reliance on foreign support masks an underlying capacity challenge. Kosovo should increase efforts on local implementation of core legislation such as EIA, and demonstrate its environmental enforcement capacity.

1

Why Adopt the Environmental Acquis?

Adoption of the Acquis introduces an approach to environmental governance that creates stronger ownership and an opportunity for citizens to influence government decisions; more transparency and local responsibility for natural resources; improved project programming and planning capacity; and a more predictable legal framework for foreign and private sector investors.

he EU Acquis is driving West Balkans environment institutions to adjust to a changing legal framework that has significant implications for the future scope and organization of their work. Institutional changes are part of a government-wide adjustment that expands the role of environmental protection, increases accountability, and demands improved communication on outputs and objectives of environment programs and investments.

During the short pre-accession period, the West Balkans will have a small window to capture the benefits available before accession when political will for reform is the highest. This small window presents a one-time opportunity to adapt institutions systematically and access additional resources, guidance, and technical assistance before completing the stabilization and association process. New member states in Central and Eastern Europe (CEE) received considerable assistance in the decade prior to the 2004 European Union enlargement. Unless countries complete institutional reforms and arrangements that align with the EU Environment Acquis, future investments could be wasted, misdirected, or unsustainable. Thus, the future of the environment depends on improving cooperation and sharing information to capture potential efficiencies and create synergy during the process.

This report offers guidance, focuses on institutional change and government reforms, and links lessons from CEE experience to institutional reform and implementation challenges faced by the West Balkans.⁶ The report presents background data on the West Balkans to assess where they are in this transition and outlines how available assistance during the preaccession period can be used more effectively to establish long-term capacity for implementation.

In the CEE countries, EU accession and adopting the Acquis elevated the importance of the environment on the national agenda. Because the state of the environment affects every sector, many benefits can accrue from increased attention, including improved market participation and access to programs; improved health, particularly reduced respiratory and waterborne diseases; reduced damage and aging of buildings; improved occupational safety; economic growth, particularly that linked to industrial

⁶ CEE countries surveyed: Czech Republic, Estonia, Latvia, Lithuania, Poland, Slovakia, Slovenia, Hungary, Bulgaria, Romania.

Box 1.1

EU Environment Acquis Overview (Full list in Appendix A.1)

The EU Environment Acquis includes more than 200 legislative acts under the following **eight** broad categories.

- Horizontal (environmental impact assessments, access to information, strategic environmental assessment, public participation, and environmental liability);
- Air Quality (ambient air, VOCs from petrol stations, SO2, NOx, particulate and lead emissions; Sulphur content in Fuel, Vehicle emissions, Emission Trading, Emission Ceilings, Ambient Ozone);
- Waste Management (hazardous waste, packaging waste, sewerage sludge, waste oils disposal, PCBs/PCTs, battery disposal and labeling, landfill of waste, incineration of waste, disposal of vehicles, waste electronics disposal, hazardous substances);
- Water Quality (Urban Wastewater, Drinking Water, Nitrates, Bathing Water, Groundwater,

- Dangerous Substances to water, Mercury, Cadmium, HCH Discharges, Surface Water Abstraction, Shellfish water, Fish water);
- Nature Protection (Habitats, Wild Birds, Zoos);
- Industrial Pollution Control (Pollution Prevention and Control, Solvents, Large Combustion Plants);
- Chemicals (Dangerous Substances, Release of GMOs, Animal Experiments, Asbestos, Biocides); and
- Noise

The number of directives is large—but in practice, many functions can be integrated and use common management systems. The EU introduced several Framework Directives as a first step to integrate laws across environmental media. Now countries will need to design national administrative structures that support integration, which rarely correspond directly to the thematic clusters of the legislation.

upgrades and tourism; increased crop yields and fish stocks; lower ecological and hazardous risks; and improved quality of life. Adoption of the Acquis introduces an approach to environmental governance that creates stronger ownership and an opportunity for citizens to influence government decisions; more transparent and local responsibility for natural resources; improved project programming and planning capacity; and a more predictable legal framework for foreign and private sector investors.

"Environment Acquis" is the body of European law focused on the environment; it is the second largest thematic body of legislation after agriculture. The EU regulations directly apply to all EU member states; the *directives*, on the other hand, will be transposed into national laws, allowing each country to implement and administer based on individual constitutional structures and a principle of subsidiary among states. The Environment Acquis can be summarized under eight broad categories (Box 1.1).

Environment law in Europe has moved from the single issue legislation of the past to today's more

integrated approach, which involves horizontal or cross-cutting legislation (e.g., Environmental Impact Assessment), and the introduction of "Framework Directives" (e.g., air, waste, water) to better integrate laws for the same environmental media. Approximation of the Acquis into national legislation is a process involving adoption of specific binding legal measures (quality and technical standards, testing and notification requirements, etc.) and country-specific decisions on discretionary and suggested legal measures. National legal details vary to reflect underlying administrative and implementing structures, and choices—such as how it will be enforced.

- Air quality legislation is broad-based in scope and addresses traffic emissions, fuel quality control, large combustion plants, volatile organic emissions from industry, and so forth; air quality legislation governs both local and transboundary effects and contains targets for greenhouse gas and carbon emissions.
- Waste legislation focuses on reducing and minimizing wastes, on waste disposal that protects the

⁷ The body of EU Law comprises regulations, directives, decisions, guidance, and EU Court of Justice Decisions

 $^{^8}$ DG Environment uses these 8 broad categories in their progress monitoring

⁹ Framework Directives are sometimes called "mother" directives with the associated or subsidiary legislation referred to as "daughter" directives.

environment, and on proper handling and disposal of hazardous and toxic wastes. A further breakdown of environmental legislation can be made based on (a) its importance and linkages to trade, including participation in a common EU market (Appendix A2); (b) the "heavy" or costly investment requirements (Appendix A3); (c) and transboundary cooperation (Appendix A4).

Water legislation aims to maintain water quality, protect water sources from contamination by controlling and regulating emissions, and promote an integrated approach to river basin management. Industrial pollution control legislation takes an integrated approach to environmental permits, and applies the "polluter pays" principle to promotion of waste minimization and control of emissions through self-monitoring and upgrading technologies.

In 1998, the European Council decided to integrate EU Environment Law more explicitly into national government sector strategies, initiating the "Cardiff Process."10 The Cardiff Process focuses on nine key sectors¹¹ and has resulted in development of new environment-related directives. Under these directives, implementation falls more directly on sectoral authorities rather than the environment administration.12 As a result, the Environment Acquis is crosscutting, presenting not only opportunities for sustainable development and growth in Europe, but also complexities and challenges for implementation. Implementation requires an integrated approach to government administration that includes coordination mechanisms across government, local responsibility and action, public participation, and accountability of state institutions.

During accession and negotiations, the European Commission refrains from prescribing a standard in-

stitutional set-up for the environment, ¹³ as a result, in the early stages of this process, countries lack clear guidance or knowledge of the administrative requirements of the Environment Acquis. For CEE states, this information vacuum resulted in trial and error creation and dismantling of institutions and an ad-hoc approach to capacity development. Also due to lack of guidance, many CEE states transposed large sections of environmental laws that they later had to revise to adapt to new institutional structures.

From the perspective of post-accession, the rationale for certain institutional frameworks, administrative reforms, and functional demands is now more apparent. The urgency for effective Acquis implementation is underscored by legal force of the Environment Acquis, cross-compliance with agriculture subsidies and EU grant-financed investments, and linkages to growth and trade in the common EU market. Today most CEE states report significant gains in capacity stemming from the accession process, but acknowledge that institutional strengthening is a long-term and ongoing process, requiring stable institutions and human resources supported with regular training and professional development.

This report presents the current status of environmental institutions in the West Balkans alongside the institutional reform process undertaken in CEE states and the lessons learned. From this a roadmap is presented that will guide West Balkans through the functional changes they will need to complete their adoption of the Environment Acquis.

First, the report will provide an overview of key environment issues and challenges faced within the region, including environment institutional and administrative structures. Second, the report addresses the key lessons learned from new EU member states, which emerged from a detailed stocktaking effort to identify reform priorities and early actions. Finally, the report offers recommendations for the region and individual states to move forward. Comparative data and statistics have been brought in where possible to help emphasize key points and provide a broader regional perspective. Many CEE countries contributing to the report also welcomed the opportunity for

 $^{^{\}rm 10}$ For the city in which the European Council meeting was held in 1998.

¹¹ Transport, Agriculture, Energy, Industry, Internal market, Development, Fisheries, General Affairs, and Economic and Financial Affairs.

¹² Directive on the promotion of bio fuels/renewable fuels for transport is an example. The 2007–2013 Structural Instrument for Agriculture also reflects the spirit of this environment "mainstreaming" effort with the flow of funds for all agri-environment and Natura 2000 payments now coming through the agriculture funds.

¹³ This is due to principles of subsidiary of states and the range of governance structures that exist with the EU. Endorsement of one institutional set-up over another would not be appropriate in this context.

self-reflection over the last decade of reforms, progress, and challenges and expressed a keen interest in helping the West Balkan states learn from their trial and error, and best practice solutions.

What Are the Key Challenges?

The West Balkan states reviewed in this report include Albania, Bosnia and Herzegovina, Former Yugoslav Republic (FYR) of Macedonia, Montenegro, Serbia, and the Territory of Kosovo. ¹⁴ Croatia is included for comparison given its close regional links. All countries in the region have established relations with the European Union through the Stabilization and Association Process (SAP), which was developed in 2000 to promote European integration. The specific stage of progression in this process varies for each State as presented below (Table 1.1).

The annual progress reports issued by the EU to each state include a section for the Environment Acquis. In late 2005, all West Balkan reports emphasized the need for strengthened administrative capacity. In Croatia and Macedonia, the environment chapter was highlighted

Table 1.1 Re	elations with the EU
Albania	SAA ¹⁵ signed in June, 2006
Bosnia and Herzegovina	Expecting to start negotiations on SAA
Croatia	SAA in force from February 1, 2005; EU accession negotiations started October 2005, Environment chapter screening, May 2006
FYR Macedonia	SAA in force from April, 2004; EU candidate country as of December, 2005
Serbia	Pending starting of negotiations on SAA
Montenegro	SAA negotiations agreed to proceed on basis of independent state– July, 2006
Territory of Kosovo	Special SAP tracking mechanism to lead into SAA

as the most difficult for alignment—particularly institutional and administrative capacity challenges for implementation.

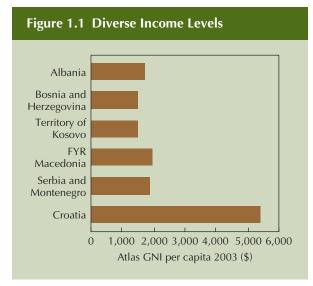
Income

In a region with such a wide range of income levels and growth (Figure 1.1), environmental challenges vary. ¹⁶ For example, rapid economic growth can mean more investment in cleaner production methods but it can also mean higher consumption patterns that increase waste management challenges and pressures on environmental balance. On the other hand a slow or stagnant economy has less to invest in the environment, with predictable results: poor minority groups engage in solid waste picking; subsistence living accelerates deforestation and land degradation; solid waste leads to open dumping; poor access to clean water and sanitation exposes people to disease, and low-income people are more exposed to industrial contamination.

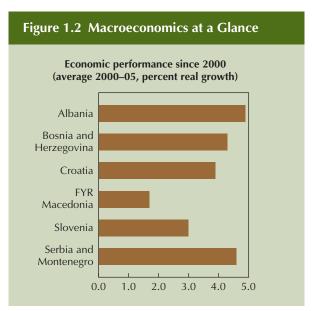
Although the cost of improving environmental conditions can be high, governments can develop mechanisms to recover costs that take into account what consumers—including vulnerable groups—can afford. Integrating environment and social concerns require stronger institutions and deeper local involvement. West Balkan government environment strategy documents highlight a need to clarify ownership rights and access; reclassify and expand protected areas; support community involvement; rehabilitate polluted areas; promote sustainable land use planning and use of natural resources; strengthen environmental institutions; and support integrated rural development. The EU Environment Acquis promotes similar objectives thereby reinforcing the benefits of environmental improvements. It is the responsibility of each government to implement the laws in ways that ensure the poor are not disadvantaged.

As defined by the United Nations Security Council Resolution 1244.
 Stabilisation and Association Agreements (SAA) provide the legal framework for relations and progressive actions toward harmonization with the European Union.

¹⁶ Croatia is near or in some cases exceeds CEE country levels, and the remaining countries fall well below CEE median incomes. Growth rates also vary significantly with Albania leading subregional growth at above 6 percent and Macedonia reporting lowest growth rates just over 1 percent (Figure 1.2). GDP levels (2003) similarly diverge across the region with Kosovo reporting the lowest at 2.6 Billion USD, followed by Albania 6.1, Macedonia 4.7, Bosnia and Herzegovina 7.0, Serbia and Montenegro 20.7, and Croatia 28.8.



Source: World Bank, 2006.



Source: World Bank, 2006.

Population, land resources, and management

The surface area and population of the West Balkans (Table 1.2) is predominantly small; urban centers are home to 44 to 66 percent of the population. Albania and Bosnia and Herzegovina are less urbanized than Macedonia, Croatia, and Montenegro, and Serbia is in the middle. The most urbanized countries have a low rural population density, and face environment challenges from land fragmentation after war and migration, such as increased problems with control of invasive species and forest fires. Generally, in Albania and Bosnia and Herzegovina, rural population densities are higher and incomes are lower; these countries face the most human pressure on natural resources because more people are living from the land. These countries face depopulation in areas such as mountainous regional pockets. As economies grow, rural populations will likely continue to migrate to urban centers. For example, between 1999 and 2005, Kosovo experienced the most dramatic rural-to-urban population shifts.

The primary natural resources in the West Balkans are agricultural land, forests, water resources, and biodiversity. Agriculture and forests comprise most of the land area and contribute significantly to local economies, most notably in Albania and Kosovo (Table 1.3). Regionally, agricultural land is threatened by new construction, soil erosion, unclear ownership, fragmented land plots, and a lack of irrigation coverage. Pesticides and fertilizer use is generally lower than EU standards across the region, thus pesticide contamination of soil is not serious enough to warrant priority action. However, forests are threatened by deforestation and excessive or illegal cutting—particularly in Bosnia and Herzegovina and Kosovo—contributing

Table 1.2 Populations and Land Areas									
	Albania	Bosnia and Herzegovina	Territory of Kosovo	FYR Macedonia	Serbia	Montenegro	Croatia		
Population (million)	3.1	3.9	2.4	2.0	7.5	0.6	4.4		
Percent urban population	44.4	44.9	66	59.6	52	60	59.4		
Land area (thousand km²)	27.4	51.1	10.9	25.7	88.4	13.8	56.4		

Source: 2006 Little Green Data Book.

Table 1.3 Agriculture and Forests									
	Albania	Bosnia and Herzegovina	Territory of Kosovo	FYR Macedonia	Serbia	Montenegro	Croatia		
Percent agricultural land	41	42	53	49	65	14	56		
Percent agriculture in GDP (2005)	25.2 (2004)	11.5	30	12.0	12 (2002)	15 (2004)	7.7		
Percent agriculture employment	58.5 (2004)	4.0 (2004)	65	4.1 (2003)	30	15	16.2 (2004)		
Percent forest area	36.2	42.7	41	35.6	26.7	53.9	38.2		
Deforestation (percent change, 1990–2005)	0.0	(+) 0.1	No figure, known + rates	0.0		(-) 0.4	(-) 0.1		

Sources: 2006 Little Green Data Book; EC Progress Reports, 2005; UNECE, 2005; REC, 2006; Kosovo NEAP, 2006.

to soil erosion, loss of flood control, and threatened ecosystems.

Planning land use and protecting the environment depends on effective coordination between the two functions. The history and context of land management planning varies by country, with a closer historic link to environment protection in former Yugoslavia. Enforcement and control of spatial plans is generally weak and sometimes exacerbated by the housing needs of refugee and migrant populations. In Albania, for example one of the most pressing environmental issues is land degradation caused by illegal developments stemming from a lack of effective territorial planning and control, with damage to coastal and agricultural land.

Natural Assets

In addition to being a global hotspot for biodiversity,¹⁷ the West Balkans area is noted for levels of endemic species that are over four times higher than the rest of Europe. The percentage of land covered by protected areas¹⁸ is below the EU average of 15 percent, and ranges from the low of 0.5 percent in Bosnia and Herzegovina to 9.0 percent in Croatia (Figure 1.3). Croatia and Macedonia have the most developed systems and have progressed the most in management planning; however, significant work remains to integrate and harmonize

The Balkans region is rich in wetlands, most of which are situated along state borders or coastlines thereby requiring transboundary cooperation among countries. Croatia has four Ramsar¹⁹ designated sites, Albania and Serbia each have three, and Bosnia and Herzegovina, Macedonia and Montenegro each have one. For most of the region, nature protection and tourism are closely linked and comprise an important economic sector. The potential to enhance linkages between nature protection and tourism is high and is an integral part of most of the West Balkan Country Development Strategies. Landscape diversity linked with rural cultural traditions provides a strong asset for tourism growth.²⁰

Most West Balkan countries have abundant ground and surface waters, except for some arid island and high mountain areas. Groundwater is the main source of drinking water, while river and lake waters are more often used for recreation and energy production from hydropower. Albania and Bosnia and Herzegovina have the highest dependence on hydropower, generating over 90 percent and 60 percent of electricity supplies respectively. The region has unique inland water

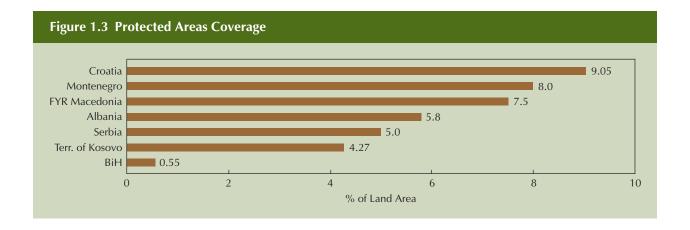
with the EU Natura 2000 network. Although protected area networks are increasing, most parks in Bosnia and Herzegovina, Albania, and Kosovo are still "parks-on-paper"; they lack management, infrastructure, and tools to ensure effective biodiversity conservation and sustainable resources use.

 $^{^{17}}$ One of Conservation International's 25 global hotspots for biodiversity (part of Mediterranean basin).

¹⁸ Main categories of protection are national parks, nature parks, natural monuments, and protected landscapes.

¹⁹ Internationally declared wetlands of global importance governed under the Ramsar Convention

²⁰ This is discussed further in the context of industry and legacy pollution.



bodies with high biodiversity values including ancient glacial and tectonic lakes. Because many rivers and lakes are transnational, there is a need to establish common water management regimes. The region falls geographically within the wider Black Sea-Danube and Mediterranean Basins.

Major risks to water quality are: (a) lack of sewage treatment, especially in coastal areas; (b) incomplete sewage networks with high levels of leakage and losses; and (c) industrial wastewater discharges. A concern for most countries is ambient pollution in waterways due to high bacteria counts, heavy metals, and other industrial pollutants. Low oxygen levels have led to progressive eutrophication in many waterways. Overextraction of sand and gravel from riverbeds has increased flooding and suspended sediments. Shallow drinking water wells experience nitrate contamination from animal and human wastes. Across the region, water quality monitoring systems are generally poor and underdeveloped so local authorities are unable to assess the risks to public health. In Serbia for example, environmental documents report the groundwater quality to be poor and deteriorating, but monitoring systems and data collection techniques are outdated, and coverage is poor.

Water infrastructure

No country in the region has advanced wastewater treatment at levels promoted by the EU Environment Acquis, and all will face significant challenges in financing this level of investment. Rural sewage network coverage is low and wastewater generated is generally discharged directly to river bodies and karst sinkholes, or into poorly maintained septic systems. While urban

wastewater coverage rates are much higher, the service is generally poor and the level of treatment is low.

Water supply coverage varies across the region; most rural areas rely on individual groundwater wells. Coverage data can be misleading because in some places water supply is intermittent and in others infrastructure is deteriorated—for example, war damage in Bosnia and Herzegovina. Hence, the numbers presented in Table 1.4 below are indicative only. Water utilities in the region typically lack autonomy and the infrastructure is poorly maintained. In most countries, restructuring management and resetting tariffs to cost-recovery levels lag the efforts of EU counterparts.

Investment needed

Substantial investment will be needed to support environmental infrastructure improvements, but municipal finance reforms are still insufficiently developed. Two factors should dictate technology options and phasing of investments: (a) municipality and their utilities' ability to meet operations and maintenance costs; and (b) consumers' ability and willingness to pay. In the mid-80s, some countries in the region invested heavily in new wastewater treatment facilities but then struggled to operate and maintain them; in the early 90s, war damage and costly technologies made rehabilitation unaffordable.

Industry and legacy pollution

Across the region, industrialization levels vary. Bosnia and Herzegovina, Macedonia, Montenegro, and Croatia have the largest industrial sectors as a percentage of GDP (2005). Macedonia and Serbia have the largest

Table 1.4 Water Supply and Wastewater Infrastructure									
		Romania	Albania	Bosnia and Herzegovina	Territory of Kosovo	FYR Macedonia	Serbia and Montenegro	Croatia	
Water	Urban	92	85	N/A	90	100	97	95	
supply	Rural	34	65	N/A	20	28	68	52	
coverage (percent)	Total	66	67	56 (FBiH) 48 (RS)	44–50	71	83	76	
Sewage	Urban	86	90	56	N/A	68	88	70–75	
coverage (percent)	Rural	10	37	10	N/A	13	22	5 (↓ 2,000) 35 (2,000– 10,000)	
	Total	52	59	50 (FBiH) 35 (RS)	28–30	46	56	40	

Sources: World Bank, 2003 (data for 2000); REC, 2005 & 2006; Croatian Government, 2005.

work force in the industrial sector (Table 1.5). Historically, most industries disposed of their wastes on site at their facilities, and regulatory oversight was weak for water and air industrial pollution discharges. War and a general economic downturn during the late 90s decreased industrial outputs and pollution emissions but as economies in the region recover, pollution levels will rise. Large industry, once primarily state-owned is undergoing restructuring and privatization but most privatization has occurred at smallscale facilities. Privatization of large-scale heavily polluting industries is lagging—chemicals, energy, metallurgy, and mineral industries, and waste facilities (Table 1.6). Except for Albania, the private sector share in GDP is relatively low for countries in the region, highlighting the potential to use privatization to increase the share of private capital for environmental compliance and investment.

Since the state will become the national environmental regulator, privatization offers an opportunity to establish clear expectations for environmental compliance with private sector entrepreneurs. However thus far, no state in the region has established a comprehensive program to integrate environment into the privatization process, despite growing awareness of the problem. Across the sub-region, privatization has often proceeded with little consideration for future environmental laws, including costs and requirements to upgrade industrial pollution control equipment, deferring immediate action, and minimizing private sector responsibilities. The few privatization agreements that have included specific plans to address on-site legacy pollution have been initiated by foreign investors rather than central governments. Box 1.2 below describes how this has been addressed in Bulgaria.

Table 1.5 Levels of Industrialization									
	Albania	Bosnia and Herzegovina	Territory of Kosovo	FYR Macedonia	Serbia	Montenegro	Croatia		
Industry share of GDP (2005)	19.5 (2004)	27.8	N/A	29.2	20	28	27.9		
Industry share of employment	13.6 (2004)	N/A	N/A	47.4 (2003)	46 (2002)	30 (2004)	29 (2004)		

Sources: EC Progress Reports, 2005; UNECE, 2005; REC, 2006; Kosovo NEAP, 2006.

Table 1.6 Progress with Enterprise Privatization and Restructuring									
	Private Sector Share in GDP (1995 and 2003)		Small-Scale Privatization ¹	Large-Scale Privatization ¹	Enterprise Restructuring ¹				
Albania	60	75	4.0	2.3	2.0				
Bosnia and Herzegovina	n.a.	50	3.0	2.3	2.0				
Croatia	45	60	4.3	3.0	2.7				
FYR Macedonia	40	60	4.0	3.0	2.3				
Serbia and Montenegro	n.a.	45	3.0	2.3	2.0				
Slovenia	45	65	4.3	3.0	3.0				
Czech Republic	70	80	4.3	4.0	3.3				
Hungary	60	80	4.3	4.0	3.3				
Poland	60	75	4.3	3.3	3.3				

Source: EBRD (2003; 2004 Slovenia, Czech Republic, Poland and Hungary).

¹The EBRD indicator ranges from 1 to 4+, with 1 representing little progress towards privatization and 4+ indicating more than 75 percent of enterprise assets in private ownership with effective corporate governance.

Box 1.2

Bulgaria Integration of Environment In Privatization Process

Bulgaria established a comprehensive legislative framework and institutional capacity for handling environmental issues in privatizations with support from the World Bank—an investment loan and two adjustment operations.

The Environment Protection Act of 1991 provided a new legal foundation for environmental policy that addressed environmental liabilities in the context of privatization. It stated that foreign or domestic investors were not liable for environmental damage resulting from past action or non-action. Growing awareness of the importance of addressing environmental issues led the Bulgarian government to amend the Environment Protection Law and the Privatization Law to address details of state liability including new regulations to clarify basic principles, procedures to determine damages, and financial mechanisms. In 1998, a resolution required State Owned Enterprises (SOEs) to carry out an EIA as an integral part of the privatization process, including an assessment of pre-privatization environmental damage.

To avoid ambiguity in addressing past environmental liabilities, the Ministry of Environment and Water adopted a methodology that includes environmental audits and EIA. The methodology includes a detailed design for remediation measures if environmental assessments identify significant risk. This remediation plan forms part of the government's Sales Purchase Agreement for privatization and the investor is legally bound to implement it.

Accession accelerated adoption of EU environmental directives, including harmonization of national legislation with the Industrial Pollution Prevention and Control (IPPC) Directive. The Government understood challenges facing Bulgarian companies and recognized privatization as a good opportunity to address them. The EIAs not only assessed past liability issues but also proposed plans for enterprises to comply with EU directives. These Compliance Plans included programs of environmental investments, integrated in the Sales Agreement, for cleaner technologies and waste reduction measures for compliance with IPPC norms and standards.

Funding remediation costs

Among the countries of the region, Serbia has done the most to mainstream environment issues into the privatization process. Serbia has drafted—but not yet passed—an environment and privatization law and established a mechanism to allocate 10 percent of privatization proceeds to fund future remediation costs. So far, Bosnia and Herzegovina, Montenegro, and Macedonia's experiences with environmental auditing and impact assessments in privatizations are unsystematic. Macedonia has established coordination between the environment ministry and the privatization agency but this is also unsystematic. In 2005, a detailed review in Bosnia and Herzegovina identified 55 enterprises in Entity RS and 18 in Entity FBiH on the privatization list that pose a moderate to major environmental risk.21 These industries include coal and bauxite mining, steel and casting plants, coke and chemical plants, leatherworks, metals processing, wood and paper processing, and agriculture and food processing industries. In other countries, industries known to pose environmental problems include cement in Albania, and mining in Serbia and Kosovo.

Lengthy permit-granting process

The most important EU Directive addressing industrial pollution is the Integrated Pollution Prevention and Control (IPPC) Directive, which regulates largest polluters including heavy industry, large farming complexes, and many waste management facilities. Environmental permits stemming from this directive are complex, integrate all media, and are often linked to pollution control technology upgrades benchmarked with similar EU facilities. Preparation time for one permit application can take several years and involve investment decisions that are the responsibility of the operator (usually private sector). Therefore, facilities designated to receive this type of permit must be identified early to allow sufficient preparation time for industry.

"Both permitting authority and expert support authority were established in 2002 and implementation started on 1st of January 2003. *In the previous media-based system, there* was no habit of developing guidance since the legislation was sufficiently descriptive and there was little space for case-by-case approach. Within the IPPC system, the lack of guidance was discovered just before the implementation started because for example, there was no permit template and nobody knew how the cooperation with other authorities would work in practice . . . It was expected that sufficient training will be delivered through participation in pilot permitting projects, but almost all projects finished at the stage of assessing the application and not by writing the permit."

FORMER DIRECTOR OF THE INTEGRATED POLLUTION PREVENTION AND CONTROL AGENCY,
CZECH REPUBLIC, NOV. 2005

Internationally competitive industries

Several countries have broadly estimated the potential number of IPPC facilities as part of early preparation for the IPPC directive, but no country has a fully publicized list. The following estimates of potential permit numbers are an indicator of environmental enforcement and the capacity to administer this technologically heavy directive: Albania (15–20 facilities/ installations); Bosnia and Herzegovina (est. 56); Macedonia (est. 130); Serbia (est. 242); and Croatia (150–160).²² Government environment officials need to be well trained and educated in industrial sectors to regulate the facilities because the directive sets out a wide range of technical solutions and a negotiable approach. The IPPC directive can be instrumental to advance and retrofit national technologies for a more internationally competitive industrial sector.

Air Quality

Traffic and industrial emissions are the main sources of air pollution in the region; air quality has deteriorated in

²¹ WB Report Strategic Environment Assessment on Planned Development Policy Lending to Bosnia and Herzegovina, 2005.

²² Only Serbia, Montenegro, and Macedonia have legislation requiring a list of IPPC Annex 1 installations.

Table 1.7 Air Pollution									
	Albania	Bosnia and Herzegovina	Territory of Kosovo	FYR Macedonia	Serbia and Montenegro	Croatia	Europe and Central Asia Averages		
CO ₂ per capita (metric tons) (2002)	0.8	4.7	5.5	5.1	3.7	4.7	6.7		
Particulates (urban-pop weighted avg., µg/m³) (2002)	58	22	N/A	29	17	35	35		

Sources: 2006 Little Green Data Book; Kosovo poverty assessment 2005.

the largest cities due to the large and growing number of vehicles and heavy traffic. Similarly obsolete control technologies and lack of treatment in metallurgy, chemical, and energy have degraded air quality in industrial areas—most notably in Macedonia, Kosovo, and Montenegro. Acid rain, linked to industrial pollution, retards vegetation growth and accelerates deterioration of the built environment. Carbon emissions per capita are highest in Macedonia and Kosovo, while population-weighted particulate matter emissions are highest in Albania (Table 1.7).²³ The smallest particulate emissions—linked to respiratory diseases in large urban areas—are often by-products of gasification or burning, and require more advanced technology to control.

Most countries have ratified or are in the process of ratifying the Kyoto Protocol; however, little progress has been made to establish implementation mechanisms.²⁴ The EU has established an Emissions Trading Directive in 2003 that introduced a new cap-and-trade policy for carbon emissions, which requires each Member State to agree with the EU on a national allocation plan and establish administrative systems to enable internal trade of carbon permit allocations.²⁵ Two of the "heavy investment" directives under the

Solid Waste Management

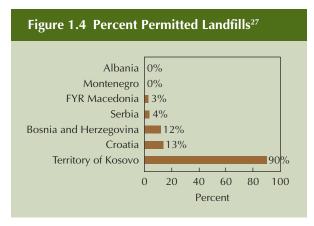
Municipal solid waste management remains a challenge for most countries across the region, largely due to inadequate disposal facilities. Solid waste collection ranges from a coverage rate of 50–80 percent but rural collection services are extremely limited. The largest cities have organized systems with close to 100 percent collection rates. Most countries have compiled inventories of illegal waste dump sites—generally in the thousands per country—that must be closed to comply with EU rules.

Construction or upgrades to fully compliant landfills have fallen behind progress on closing wild dump sites; unless governments improve sequencing and environmental enforcement, new illegal dump sites could emerge. Most operating landfills in West Balkan countries do not meet environmental conditions and would be unable to adapt to EU standards (Figure 1.4), except for Kosovo, where donors' help has financed investments in landfills that meet EU standards. If environmental infrastructure investments are combined with strengthened environmental enforcement, illegal circumventions of "polluter pays" principle are less likely.

Environment Acquis—the Industrial Pollution and Prevention Control (IPPC) Directive and the Large Combustion Plant (LCP) Directive promote upgrades in air pollution control technologies and equipment in large industrial polluters. Often the same facility investments will help comply with both directives; the private sector would normally bear improvement costs, except for state-owned industries.

 ²³ Suspended particulates less than 10 microns in diameter. The data averages emissions for cities with a population over 100,000.
 ²⁴ The Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC) targets a total cut in greenhouse gas emissions of at least five percent from 1990 levels in the commitment period 2008–12. The European Union ratified the Protocol on May 31, 2002.

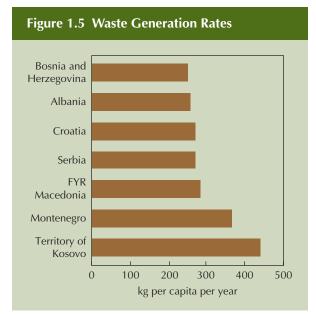
 $^{^{25}}$ In this case "internal" refers to trade within the country and after acceptance by the EU, trade of carbon allocations with the European Union.



Sources: Government Strategies; UNECE (BiH); World Bank (BiH).

However, throughout the region it will be a challenge to come up with a fee structure that balances consumers' ability to pay with the need for service providers' business viability in the short term, and system sustainability in the long term. As a result, most countries' waste management strategies envision regional services to take advantage of cost economies of scale; this will eventually reduce the number of disposal facilities and close many of the un-permitted landfill sites.

Waste generation rates for the region fall in line with other transition states—from 250 to just over 400 kg/capita/year (Figure 1.5). In the future when the EU Waste Framework Directive is implemented, it is expected that waste volume would contract and recycling volumes would expand. However, economic growth could in-



Sources: Government Strategies; UNECE (Albania and BiH); World Bank (Serbia and Montenegro).

crease levels of consumption and waste; for example, the EU-25 average waste generation rate is 537 kg/capita/year. Currently, most waste is mixed, has high organic content, and often includes medical and chemical wastes. Typically, in large cities recycling programs are not comprehensive and most are limited to plastic, glass, and paper collection points, or beverage company-sponsored return systems (i.e., Novi Sad in Serbia).²⁶

Form and Functions of Government

This section examines the current state of environmental institutions in the West Balkans and changes needed to harmonize with the EU. Although the Environment Acquis and the EU do not specify environment institutional structures, many functions and tasks are embedded in EU Directives. Key challenges include defining organizational structures, building staff and capacity, integrating environment across other government functions, and ensuring links with the governance framework and decentralization. Comparisons with EU member states and CEE new member states are provided to better understand the relative position of the West Balkan states.

The institutional capacity of governments to protect the environment can be difficult to measure directly. Diagnostic tools, peer exchange programs, self-reporting mechanisms, and indicators have been developed and integrated into the EU accession process, and others are used more broadly internationally. This study reviewed capacity measurement tools in European states (see Appendix B). Specific environment tools include indicators such as the European Environment Agency's core indicators, European Common Indicators for Urban Environment Quality, and EU Minimum Criteria for Environmental Inspections (Appendix C). Some accession tools integrate the environment with other topics.²⁸ In addition, EU grant programs can help strengthen capacity and institutions.²⁹ Several peer ex-

²⁶ Croatia has recently begun implementation of the waste packaging directive and in 2006 established a national beverage and bottle return system with revenues administered by the environment fund.
²⁷ Permitted landfills are those that comply with all legislation for site design, operations, and maintenance. In practice, landfills without permits still operate but are considered "out of compliance" until all regulatory requirements are met.

²⁸ Early self-diagnostics in National Programs for the Adoption of the Acquis; Pre-Accession Screening, in which candidate states and the Commission exchange face-to-face views; and "progress monitoring" or self-reporting by candidate countries that covers over 30 environment directives (Appendix 1a).

change and assessment programs have "twinning" arrangements for practitioner capacity-building guidance; peer reviews of capacity to implement environment directives; and an environment peer review program for municipalities. Voluntary reporting schemes and certification programs (e.g., municipallevel Eco-Management and Audit System) apply some of the earlier mentioned indicators.

Macedonia, Albania, and Bosnia and Herzegovina have carried out functional reviews on public administration reforms. These reviews assess environment administrative capacity needs and face the significant challenge of capturing the full breadth of environment functions that cut across administrative boundaries and government levels. Other non EU-specific tools include the OECD Environmental Performance Reviews, globally exchanged lists of Environmental Indicators, Performance Reviews of Environment Funds, and assessments of environment spending against Public Expenditure Management Guidelines. The United Nations Economic Commission for Europe (UNECE) has a voluntary program of Environmental Performance Reviews that evolved from the OECD Environmental Performance Reviews. The UNECE Environmental Performance reviews have been completed in all West Balkan countries. Networks of professional environmental practitioners exist at the sub-regional, EU, and international levels—excellent for a for dialogue and exchange. Several networks have initiated peer benchmarking to improve environmental performance, although direct application to country-specific programs is still in early stages. For example during 2005-06, the sub-regional network for the West Balkans, funded by EU CARDS, has supported voluntary peer reviews on IPPC and introduced cross-country benchmarking practices (with World Bank support).

Key government functions and obligations under the Environment Acquis can be broadly separated into policy making; regulation; and service provisions performed across all levels of government (Table 1.8). The table below provides examples of environment functions for water and nature. Similar examples could be generated for other thematic environmental areas covered by the Acquis, such as industrial pollution, air quality, waste management, noise, nuclear safety, and chemicals.

Within this basic framework, key new functions required to meet environmental Acquis obligations include the following:

- Consolidate or centralize environmental data for reporting to the EU.
- Integrate environmental permitting, monitoring, and inspection functions across the environmental media (i.e., air, water, soil/waste, nature protection, and noise).³⁰
- Increase public consultation in the permitting, EIA, and decision-making processes.

Since the environmental Acquis requires clear separation of policy, regulatory, and service provision functions, all EU member states have developed organizational structures with the intent to separate these. Effective environmental governance requires mechanisms to share information and co-ordinate across these three functions. Following the subsidiarity principle, service provision,³¹ and regulatory functions tend to be decentralized and should be consistent with other decentralization reforms. In the West Balkans, institutional reforms will therefore face the same challenges as they seek to separate these functions and determine the appropriate level for each to be carried out.

Environment-related institutional arrangements vary widely in the West Balkans. A review of the environmental administrative structures in the West Balkans reveals a relatively high degree of fragmentation of environmental competencies, reflecting a past that did not recognize the environment as an independent function (Table 1.9).³²

The level of fragmentation in the West Balkan environment institutions was compared with that of

²⁹ CARDS funds (merging into the new IPA instrument in 2007) for West Balkan states, PHARE funds (similarly being replaced by IPA), and the Transition Facility for new member states.

³⁰ Typically several authorities issued permits to the same company for environmental issues: for example, health or occupational safety might issue a permit regarding noise; the water authority or construction ministry would deal with water connection and/or discharge permits; the hydromet or economy ministry would deal with emissions. The EU-supported regime for permits aims for full integration—an environmental permit that covers all environmental issues. Permitting and inspection functions are usually separate, so integration refers to media only.

³¹ For example, with solid waste collection, it is usually more costeffective for several municipalities to share a common regional facility. Each municipality remains responsible for ensuring that the service is provided, however that may include outsourced contracting to a regional service provider.

³² When environment-related responsibilities are fragmented among institutions, inefficiencies develop due to duplication of functions, policy contradictions, and weakened overall capacity.

Table 1.8 Key Government Functions under Environment Acquis								
	Water Examples	Nature Examples						
POLICY (Predominantly centralized)								
Develop laws and regulations, and policy instruments	Harmonize national laws, regulations, and policies with Water Framework Directive	Harmonize national Laws, Regulation, Policies with Habitats and Wild Bird Directives						
Develop environment-related plans and strategies	Prepare National Water Strategy; Municipal Finance Strategies	Prepare Biodiversity and Accession Strategy for Natura 2000						
Consolidate environmental information and data for government decisions	Report on water utility coverage, treatment quality; costs; performance; competing uses in water basin; aggre- gated water basin monitoring data.	Inventory species and threats; develop central databases (biodiversity inventory); statistics on forests, wetlands, and other protected habitats						
Lead environmental coordination across other government functions	Establish water basin committee membership; convene stakeholders to consider new laws and policies	Establish park boards; convene stakeholders to consider new laws and policies.						
Lead coordination of government actions under international environment treaties	Represent Government on International River Basin commis- sions; ensure fulfillment of coopera- tive agreements	Report on obligations for United Nations Framework Convention on Biodiversity, RAMSAR						
Develop programs to promote environmental awareness	Publish water quality data and water permit violations; initiate beach blue flag programs.	Launch targeted programs: e.g., Forest fire safety campaigns; Croatia "Adopt-a-bat program;" "Kosovo- my-home" campaign.						
REGULATORY (Decentralized as pr	racticable)							
Assess environmental impacts (Administrative level determined through scoping and legal provisions)	Assess impacts on waters within EIA process	Assess impacts on nature within EIA process						
Issue environment-related permits	e.g., water aspects of IPPC permit; water use/abstraction permits; water discharge permits	e.g., Natura 2000 permits; nature aspects within IPPC permit; park entry and use permits; hunting and recreation permits						
Monitor (ambient environment and facilities)	Monitor (regular and spot check) surface and groundwater quality, biological stress indicators, and water levels	Inventory wildlife and plants; monitor GIS and satellite data for habitat changes; monitor park entry and use permits against capacity restrictions						
Inspection (Administrative level typically corresponds to the same level of issued permit)	Conduct site visits to verify construction permit compliance in waterways, facility discharges; water extraction. Respond to complaints/spot check permits.	Monitor and enforce management plan uses; park rules of conduct. (Park rangers often perform nature inspection functions.)						
Environmental Enforcement (Administrative level determined based on classification of the facility involved and severity of the issue)	Prosecute or pursue corrective action for toxic waste discharge to waters; excessive sediments from work in waterways; un-permitted extraction or discharge.	Prosecute or pursue corrective action on illegal construction, logging, fishing, hunting in protected areas. Un-permitted capture, destruction, or movement across borders of rare and endangered species.						
Consolidate Environmental Information/Reporting	Aggregate and report water data to meet EU reporting and inform policies	Aggregate and report nature and parks data to meet EU reporting and inform policies						

Table 1.8 Key Government Functions under Environment Acquis (Continued)							
	Water Examples	Nature Examples					
SERVICE PROVISION (Decentralized as practicable)							
Environment Public Services (Water Supply, Wastewater Control, Solid Waste Management)	Provide water and wastewater utility services organized at municipal or regional level.	Manage and control parks admissions and services.					
Provide Environmental Data to Public	Publish water users register and water quality data; alert public to sporadic quality problems.	Publish park visitor guides; host public consultations; website data sharing.					
Recreational Services	Manage human use of public waters (including swimming, bathing, fishing, boating, etc.).	Manage ecosystems for public use including municipal and county or district parks, nature reserves, and National Parks and Reserves.					

Primary Environment Ministry and Its Subordinated Agencies Other Ministries and Agencies of Environment Ministry Primary Environment Ministry Agencies Other Ministry of Environment Ministry Agencies Ministry of Environment Ministry Agencies Ministry of Environment Ministry Agencies Ministry of Environment Agencies Agencies Manistry of Environment Agencies Agencies Manistry of Environment Agencies Agencies Agencies Manistry of Environment Agencies Agencies Manistry of Environment Agencies Agencies <th< th=""><th colspan="8">Table 1.9 State Level Institutions with Environment Competence</th></th<>	Table 1.9 State Level Institutions with Environment Competence							
Albania Ministry of Environment, Forestry, and Water Administry of Foreign Trade and Economic Relations Entity FBiH—Ministry of Physical Planning, Civil Engineering, and Corstruction FYR Macedonia Ministry of Environment and Physical Planning Ministry of Environment and Protection Montenegro Ministry of Tourism and Environmental Protection Ministry of Science and Environmental Protection Ministry of Environment and Serbia Ministry of Science and Environmental Protection Ministry of Environment and Serbia Ministry of Science and Ministry of Environmental Protection Ministry of Environment and Mater 4 5 4 1.8 Czech Republic Ministry of Environment and Water 4 5 4 1.8 Czech Republic Ministry of Environment Ministry of Environment and Water 4 5 4 1.8 Czech Republic Ministry of Environment Alministry of Environment and Ministry of Environment and Water 4 5 4 1.8 Czech Republic Ministry of Environment 8 3 2 0.6				and Agencies Outside Prime				
And Water Administration Bosnia and Herzegovina Coverall State—Ministry of Foreign Trade and Economic Relations Entity FBiH—Ministry for Environment and Tourism Entity RS—Ministry of Physical 1 2 5 Flanning, Civil Engineering, and Ecology Separate Brcko District—District 0 5 5 0 Government (Department of Utilities) Croatia Ministry of Environmental Protection, 1 5 8 6.5 FYR Macedonia Ministry of Environment and 2 6 2 2.7 Montenegro Ministry of Tourism and Environmental 4 5 2 1.4 Protection Serbia Ministry of Science and Environmental 1 1 8 3.7 Territory of Ministry of Science and Environmental 2 3 0 3.0 Kosovo Spatial Planning Bulgaria Ministry of Environment and Water 4 5 4 1.8 Czech Republic Ministry of Environment 8 3 2 0.6 Estonia Ministry of Environment 8 3 2 0.5	Country/Territory	Primary Environment Ministry	Agencies	Ministries	Agencies			
Herzegovina Entity FBiH—Ministry for Environment and Tourism Entity RS—Ministry of Physical 1 2 5 Planning, Civil Engineering, and Ecology Separate Brcko District—District Government (Department of Utilities) Croatia Ministry of Environmental Protection, Physical Planning, and Construction FYR Macedonia Ministry of Environment and 2 6 2 2.7 Physical Planning Montenegro Ministry of Tourism and Environmental 4 5 2 1.4 Protection Serbia Ministry of Science and Environmental 1 1 8 3.7 Protection Territory of Ministry of Environment and 2 3 0 3.0 Spatial Planning Bulgaria Ministry of Environment and Water 4 5 4 1.8 Czech Republic Ministry of Environment 8 3 2 0.6 Estonia Ministry of Environment 10 3 2 0.5	Albania		3	4	4	2.0		
Entity RS—Ministry of Physical 1 2 5 Planning, Civil Engineering, and Ecology Separate Brcko District—District Government (Department of Utilities) Croatia Ministry of Environmental Protection, 1 5 8 6.5 Physical Planning, and Construction FYR Macedonia Ministry of Environment and 2 6 2 2.7 Physical Planning Montenegro Ministry of Tourism and Environmental 4 5 2 1.4 Protection Serbia Ministry of Science and Environmental 1 1 8 3.7 Protection Territory of Ministry of Environment and 2 3 0 3.0 Spatial Planning Bulgaria Ministry of Environment and Water 4 5 4 1.8 Czech Republic Ministry of Environment 10 3 2 0.5			0	2	0	3.0		
Planning, Civil Engineering, and Ecology Separate Brcko District—District 0 5 0 Government (Department of Utilities) Croatia Ministry of Environmental Protection, 1 5 8 6.5 FYR Macedonia Ministry of Environment and 2 6 2 2.7 Physical Planning			1	2	2			
Government (Department of Utilities) Croatia Ministry of Environmental Protection, Physical Planning, and Construction FYR Macedonia Ministry of Environment and Physical Planning Montenegro Ministry of Tourism and Environmental Protection Serbia Ministry of Science and Environmental Protection Territory of Ministry of Environment and Protection Territory of Ministry of Environment and Spatial Planning Bulgaria Ministry of Environment and Water 4 5 4 1.8 Czech Republic Ministry of Environment 10 3 2 0.5		Planning, Civil Engineering, and	1	2	5			
Physical Planning, and Construction FYR Macedonia Ministry of Environment and Physical Planning Montenegro Ministry of Tourism and Environmental Protection Serbia Ministry of Science and Environmental 1 1 8 3.7 Territory of Ministry of Environment and 2 3 0 3.0 Kosovo Spatial Planning Bulgaria Ministry of Environment and Water 4 5 4 1.8 Czech Republic Ministry of Environment 8 3 2 0.6 Estonia Ministry of Environment 10 3 2 0.5			0	5	0			
Physical Planning Montenegro Ministry of Tourism and Environmental 4 5 2 1.4 Protection Serbia Ministry of Science and Environmental 1 1 8 3.7 Territory of Ministry of Environment and 2 3 0 3.0 Kosovo Spatial Planning Bulgaria Ministry of Environment and Water 4 5 4 1.8 Czech Republic Ministry of Environment 8 3 2 0.6 Estonia Ministry of Environment 10 3 2 0.5	Croatia		1	5	8	6.5		
Protection Serbia Ministry of Science and Environmental 1 1 8 3.7 Territory of Ministry of Environment and 2 3 0 3.0 Kosovo Spatial Planning Bulgaria Ministry of Environment and Water 4 5 4 1.8 Czech Republic Ministry of Environment 8 3 2 0.6 Estonia Ministry of Environment 10 3 2 0.5	FYR Macedonia		2	6	2	2.7		
Protection Territory of Ministry of Environment and 2 3 0 3.0 Kosovo Spatial Planning Bulgaria Ministry of Environment and Water 4 5 4 1.8 Czech Republic Ministry of Environment 8 3 2 0.6 Estonia Ministry of Environment 10 3 2 0.5	Montenegro		4	5	2	1.4		
KosovoSpatial PlanningBulgariaMinistry of Environment and Water4541.8Czech RepublicMinistry of Environment8320.6EstoniaMinistry of Environment10320.5	Serbia	•	1	1	8	3.7		
Czech RepublicMinistry of Environment8320.6EstoniaMinistry of Environment10320.5	•		2	3	0	3.0		
Estonia Ministry of Environment 10 3 2 0.5	Bulgaria	Ministry of Environment and Water	4	5	4	1.8		
,	Czech Republic	Ministry of Environment	8	3	2	0.6		
Hungary Ministry of Environment and Water 9 4 3 0.7	Estonia	Ministry of Environment	10	3	2	0.5		
	Hungary	Ministry of Environment and Water	9	4	3	0.7		

(continued)

	Primary Environment Ministry Its Subordinated Agencies	Other M and Ag Outside Environme	Fragmontation			
Country/Territory	Primary Environment Ministry	Agencies	Ministries	Agencies	Fragmentation Index	
Latvia	Ministry of Environment	12	4	2	0.5	
Lithuania	Ministry of Environment	14	5	5	0.7	
Poland	Ministry of Environment	15	5	1	0.4	
Romania	Ministry of Environment and Water Management	8	4	2	0.7	
Slovakia	Ministry of Environment	7	4	2	0.8	
Slovenia	Ministry of the Environment and Spatial Planning	7	4	6	1.3	

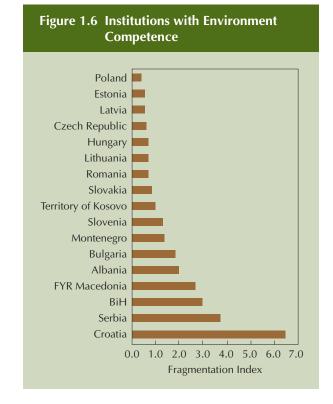
See Appendix D for complete list of institutions.

CEE states with a fragmentation index Figure 1.6.³³ Higher numbers indicate more fragmentation, which could mean further potential for consolidation, intragovernment coordination, and budgetary savings if duplicated staffing functions were identified.

In the former Yugoslavia, managing the environment was typically linked and developed from spatial planning, and thus environment ministries often retain a close link today. Beyond this, the similarities and organizational structures begin to diverge. Bosnia and Herzegovina face a huge challenge given their underlying government structures;³⁴ Croatia and Albania also exhibit significant fragmentation given the number of national institutions engaged in environment functions. Recently many countries have made major progress toward integrating environment into core governance functions, but in the region as a whole, there is weaker capacity and a higher level of institutional fragmentation than in CEE countries at similar stages of harmonization to the Acquis.

Among European countries, functions vary under the core environment ministry umbrella, although some common features emerge (Table 1.10). For example, water competencies,³⁵ are most often led by the

core environment ministry and in the CEE (Hungary, Romania, Slovakia) one of the most common intragovernment organizational reforms during Acquis harmonization was to consolidate water and environment, which helped to aggregate and report water issues under many environment directives. Ultimately all CEE countries combined environment and water,



³³ The number of environment institutions outside of the core environment Ministry divided by the number of environment institutions reporting to core environment Ministry.

³⁴ It has been documented that federated governments require more capacity aimed at internal coordination.

³⁵ Except for water utility services, which are a local-level competency.

Table 1.10 Europe	ean Environmer	ntal Minis	tries—Policy Area	ıs		
Country	Environment	Water	Spatial Planning	Agriculture	Forestry	Nature Protection
Austria	✓	/	-	1	1	✓
Belgium	✓	✓	-	-	✓	✓
Denmark	✓	✓	✓	-	✓	✓
France	✓	✓	✓	-	-	✓
Finland	✓	shared	✓	-	-	✓
Germany	✓	✓	-	-	-	✓
Greece	1	✓	✓	-	-	✓
Ireland	1	✓	✓	-	-	✓
Italy	1	✓	-	-	-	✓
Luxembourg	✓	shared	-	-	✓	✓
Netherlands	✓	shared	✓	-	-	-
Portugal	✓	/	✓	-	-	✓
Spain	1	/	shared ³⁶	_	✓	✓
Sweden	1	/	✓	_	_	✓
UK	1	/	-	1	_	✓
Cyprus	1	/	_	1	/	✓
Malta	1	/	1	1	/	✓
Czech Republic	1	shared	_	_	_	✓
Estonia	/	/	_	_	1	/
Hungary	/	/	_	_	/	✓
Latvia	1	/	_	_	_	✓
Lithuania	/	/	/	_	1	✓
Poland	/	/	_	_	1	✓ ·
Slovakia	/	✓ /	-	_	_	√ ·
Slovenia	✓	/	/	_	_	✓
Bulgaria	/	/	-	_	_	✓
Croatia	/	shared	/	_	_	-
Romania	✓ /	✓	<u> </u>	_	_	√
Albania	1	/	_	Shared	/	✓
BiH	State: ✓	_	_		_	<u> </u>
FBiH	FBiH: ✓	shared	_	_	_	✓
RS	RS: ✓	shared	1	_	_	√
Brcko District	BD: ✓	shared	_	_	_	,
FYR Macedonia	✓	shared		_		√
Serbia	√	shared	_	_		√
Montenegro	√	shared	_ ✓	_		shared
Territory of Kosovo		shared	√			snareu ✓
Territory of Kosovo	✓	Shared	V	_	_	V

Source: Government websites.

Legend:

 $\ensuremath{\checkmark}$ responsibility for the sector aggregated within the main environment ministry

- responsibility for the sector in another ministry

international initiatives and environmental policy, such as water, coast, and biodiversity.

 $^{^{36}}$ Main responsibility for spatial planning within the Autonomous Communities, but the Ministry of Environment is responsible for

and within the EU overall, some 85 percent of countries maintain this combination under the same ministry. In contrast, the West Balkans split the water competency across line ministries around 65 percent of the time and only Albania and Kosovo consolidated water and environment.

Spatial planning and environment are integrated in just over half of the West Balkans and just under half of current EU member states. Estonia and Latvia separated spatial planning from environment during the pre-accession phase; with hindsight, Estonia reported some loss of integration of these functions and a preference for the combined approach. Similarly one entity (FBiH) in Bosnia and Herzegovina separated these functions, and now reports less favorable outcomes.

Many thematic responsibilities, particularly related to natural resources (forestry, fisheries, minerals, and oil and gas) divide responsibilities across two or more ministries, with environment leading on policy, and other ministries leading on resource regulation and management. This arrangement helps manage potential conflicts of interest. Four of the 25 EU states integrate environment and agriculture functions under the same ministry.³⁷ Albania stands out as the West Balkan state with a mix of agricultural functions such as forestry, pastures, and fisheries under the environment ministry and others separated under agriculture. Romania reports that combining environment and agriculture weakened the environment function (Case Study No. 7 in Appendix E). Forestry is combined more often with environment than agriculture, but less often than water and nature protection (40 percent in CEE). When forestry is not with environment functions, it is most often with agriculture.

All EU member states except Netherlands (96 percent) consolidate nature protection functions under the environment ministry.³⁸ Croatia is unique in the region with nature protection functions under the Ministry of Culture. Montenegro has a mixed structure with its technical body, the Nature Protection

Institute, under culture and the ministry competence for nature protection combined with environment.

Each country should examine institutional arrangements to see if there are potential conflicts with environmental policy, regulatory functions, or funding. Since environment is typically a more recent responsibility it may receive fewer resources-staffing and funding—therefore governments looking to strengthen environment in line with the demand of the EU must recalibrate resource distribution. For example, in Serbia, environment, science, and technology are combined under the same ministry, which can have the effect of marginalizing environment. In an EU context, these conflicts will become even more apparent. For example in the EU, construction functions are typically separated from environment, to avoid potential conflicts of interest with the EIA Directive, particularly involving government-funded construction projects. One CEE state, Latvia, separated construction from environment during pre-accession stages; and in the Balkans, currently Croatia combines construction and environment under the same ministry.39

Environment Protection Agencies—A Useful Model?

The regulatory function

A common solution to coordinate regulatory functions and respond to European Environment Agency requirements for reporting data across environment media has been to establish an Environment Protection Agency (EPA). About 75 percent of EU countries have an EPA listed in their organizational structure as an institution separate from the environment ministry. The EPAs typically integrate environmental media that were fragmented, they lead on the regulatory function, thereby separating it from policy; they create stronger links to reporting structures and promote communication across multiple levels of government, given that many regulatory functions have been decentralized.

Often EPAs have been created from existing administrative departments that were combined and re-mapped from existing decentralized governance

³⁷ Two of these are small (Cyprus and Malta) with less than 1 million population each, and Austria is federal. UK is the fourth country with such integration.

³⁸ Romania had responsibility for National Parks under agriculture/ forestry until a new law was passed at end 2005 and the shift to environment only came into effect in 2006.

³⁹ Latvia had combined construction, tourism, and regional development with environment since 1993. In 2004 they were separated from environment as part of the pre-accession reforms.

structures (i.e., counties, administrative regions) or other ministries or agencies. Six out of ten CEE states created EPAs in the pre-accession process, and the remaining four countries separated key regulatory functions by, for example, creating independent IPPC permitting, and EIA bodies (Appendix F). Estonia's regulatory bodies have the basic three traits of an EPAintegration of media, linked reporting, and separated policy and regulatory functions—although it goes by a different name. Hungary has a structure that links reporting, and separates policy and regulatory functions, but does not fully aggregate media (notably water and nature protection). Czech Republic and Poland rely on embedded regulatory functions within decentralized governance structures (Voivodeships, Poviats, and Gminas in Poland) that do not link reporting to the Ministry of Environment unless specified for certain action; this burden of extra coordination strains an already heavy administrative load fueling the ongoing debate in these countries about the merits of creating an EPA.

Not all EPAs have full regulatory functions—some have only data reporting, collection, and information sharing responsibilities, even in old member states, depending on where regulatory functions are established. Data coordination is a basic EPA function that EU membership obliges in the form of reporting data to the European Environment Agency (the EU clearinghouse and central body for environmental information exchange). Around half of the West Balkan countries have recently established EPAs (Croatia, Serbia, Kosovo) and the others are in the process of establishing a central EPA (Montenegro and Albania) or assessing the need (Bosnia and Herzegovina). None of the Balkan EPAs yet has full regulatory responsibilities or support decentralized regulatory functions.

Environment policy and regulatory functions are still largely mixed within institutions, which increases the potential for conflict of interest, and duplicates functions. It is not efficient to regulate from the top if you can regulate closer to problem, and re-assessing and organizing these competencies remain key reform tasks ahead for most West Balkan countries, which should be completed before accession. The longer-term option to adapt central EPAs into an EPA-based regulatory system (integrating decentralized functions) has not yet been systematically addressed given its links to much broader government-wide administrative reforms.

In the West Balkans, pre-existing decentralized environment regulatory functions are weaker than they were in many CEE states at the same stage (i.e., Baltics and Poland). Hence, there are fewer existing local departments or agencies in West Balkan states to aggregate. In 2000, Slovenia overcame this challenge by merging their Hydro-meteorological Institute and the Administration for the Protection of Nature to create a new EPA; initial mixed successes and internal support have evolved into sustained work on building capacity (Slovenia maintains largely centralized environment functions). In Slovenia, this institutional merging had proponents from the Former Administration and detractors from the former Hydro-Meteorological Institute. The rough transition gave way to today's Environmental Agency, which has five main offices and staff who are positive about their functionality, despite concerns about capacity to fulfill all obligations (administrative procedures, permitting, monitoring, and reporting).

Merging the Administration for Protection of Nature and Hydro-meteorological Institute into the new Environment Agency

"In 2000 we had many different bodies with unclear responsibilities, overlapping issues etc. With introduction of the Environmental Agency we managed to clarify the situation a little bit, however as always in administrative reform you have to be careful about people and how changes will be perceived and adopted by them."

SLOVENIAN FORMER MINISTER OF ENVIRONMENT AND SPATIAL PLANNING

Highly decentralized countries with weaker administrative capacity may benefit the most from an integrated EPA system as a clearer institutional structure can partially offset some greater communications and coordination capacity challenges.

Governance and Environmental Enforcement

Since the West Balkans region ranks below the EU and CEE states on several governance measures including overall government effectiveness and rule of law, improvements to environmental enforcement will likely



Source: WB Governance Matters 2004. Note: Includes Voice and Accountability, Political Stability, Government Effectiveness, Regulatory Quality, Rule of Law, Control of Corruption.

require more systemic efforts. (Fig. 1.7 and 1.8)⁴⁰ Indeed, environmental enforcement should be integrated into government-wide public administration improvements, including regulatory and judicial reforms. Environment officials will need to develop strong cooperative links with police and border guards to effectively combat environmental crimes such as illegal transport and trade of wastes, hazardous chemicals, and endangered species, all of which are governed by environmental law. Public awareness and information campaigns to improve transparency also strengthen environmental enforcement. (See section on Public Participation)

Because environmental enforcement is key to implementing environmental laws, environmental inspection and its interface with regulatory bodies is a crucial function that needs strengthening and adapting to the EU Acquis framework.⁴¹ The inspectorate is the technical or field-based arm of regulatory enforcement whose responsibilities include early response to environmental incidents and accidents (Box 1.3); field oversight of environment permits; issuance of fees and fines for

non-compliance (in coordination with police and border guards), and spot inspections to ensure that field conditions match reports.

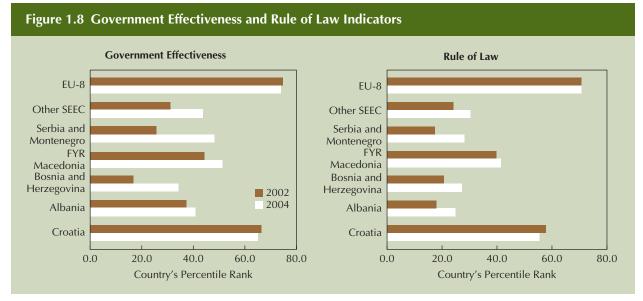
Reports on field conditions by the environmental inspectorate to regulatory bodies should be used to inform management decisions. In addition, when disputes arise, the environmental inspectorate prepares cases for prosecution on behalf of the state; therefore, it is desirable to have some independence between enforcement and regulatory functions. However they must also work together to coordinate actions for industries and permitted entities. Organizational structure varies across the region for environment inspectorates but the most common is directly under the primary environment ministry (Croatia, Macedonia, Serbia, Montenegro, Albania, and Kosovo). Bosnia and Herzegovina's inspectorate is aggregated with the full range of government inspection functions rather than clearly designated as environment. All CEE States have inspectorates integrated with or reporting to environment institutions.

The link must be well developed between the inspectorate and the regulatory body because their separate roles must be complementary and coordinated; they must share data and information on the same environmental permits and regulated bodies. Few West Balkan inspectorates can cover all environment media and most still need to coordinate among separate inspectorate units for water, nature protection, forests, noise, etc., which are often under the authority of separate ministries. None functions on an integrated permitting basis to the extent that is required by EU law. All inspectorates handle fees and fines for violations of environmental laws and permits, and perform planned and spot inspections. Overall, the link between the judiciary and inspectorate function needs strengthening, and most inspectorates' record of prosecutions is poor.

In December 2001, a program began to support regional capacity building for environmental enforcement in the Balkans with establishment of the Balkan Environmental Regulatory and Enforcement Network (BERCEN). The capacity building program was modeled on a structure used for Central and Eastern European pre-accession states and corresponds to the EU Member states network called European Network for Implementation and Enforcement of Environmental Law (IMPEL). In January 2006, the network convened its first meeting under a new name—the Environmental Compliance and Enforcement Net-

⁴⁰ World Bank: "Government effectiveness" indicators combine quality of public service provision, quality of bureaucracy, competence of civil servants, independence of civil service from political pressures, and credibility of government commitment to policies. "Rule of Law" indicators measure the extent to which agents have confidence in and abide by rules of society, which includes perceptions of incidence of crime, effectiveness and predictability of the judiciary, and enforceability of contracts.

⁴¹ At the decentralized level, regulatory bodies can be separate or embedded in local government structures.



Source: World Bank Governance Matters 2004.

Box 1.3

Incidents and Illegal Operations with Environmental Inspectorate Involvement

Environmental inspectorates carry out regular inspections and respond to incidents and illegal operations. In 2001, Croatian incidents from transport and industry were equal (25 percent), and occurred most often in large industrial centers, road junctions, or most heavily trafficked roads. The other 50 percent of incidents covered a wide range. Following are examples of publicized cases from Bosnia and Herzegovina and Croatia:

- Accidents at industrial facilities: Uncontrolled leaking of transformer oil at the Hydro-power plant in Jablanica, Federation BiH (2006); Uncontrolled leaking of light distillate oil from Dalmacijacement factory tank into Jadro River, Croatia (2002); Industrial Wastewater pollution from Celex Paper Mill into Vrbas River, Republika Srpska (2005); Fire at Modrica bitumen mixing plant, Republika Srpska (2004–05).
- Traffic accidents: Accidents with tanker-trucks transporting oil or other hazardous substances are one of the most common incidents; Boat traffic accidents on the Adriatic Sea with discharge of used oils and fuels are a common problem with responsible parties often unidentified.
- Water pollution incidents: Drinking water pollution in Bijeljina due to poor sewage network, Republika Srpska (2005); Increased levels of organic and

inorganic matter in Spreca River, Federation BiH (2005); Shipping accident by the ship "Brigitta Montanari" transporting vinyl chloride near Murter, Croatia (1984)

- Waste management: Illegal waste dumping (frequent) and fires at dumpsites (numerous cases); Fire at the hazardous waste incinerator (PUTO), Zagreb, Croatia (2002); Fire at oil disposal site at Modrica Refinery, Republika Srpska (2004–05).
- Illegal excavations: Gravel excavations in Sutjeska National Park catchment area, Republika Srpska (2004); Gravel excavations in Micevac near Velika Gorica for the rehabilitation of Jakusevac Landfill, Croatia (2002)
- Degradation of forests and biodiversity: Harvesting protected forests in urban area of Knezevo Municipality, Republika Srpska (2004–05); Appearance of invasive algae *Caulerpa taxifolia* in the Adriatic Sea (first findings in 1994) and *Caulerpa racemosa* (Croatia).

Environmental incidents occur routinely across the EU and in most developed OECD countries; in fact higher numbers of reported or publicized incidents can be an indicator of well-functioning environmental enforcement.

Box 1.4

Environmental Compliance and Enforcement Network for Accession

Environmental Compliance and Enforcement Network for Accession (ECENA) is an informal group of environmental authorities from the pre-candidate, candidate, and recent member states. Members of ECENA are Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Former Yugoslav Republic of Macedonia, Montenegro, Romania, Serbia including Kosovo as defined by the United Nations Security Council Resolution 1244 of 10 June 1999, Turkey, and the European Commission. The ECENA mission is to protect the environment in its member countries through effective transposition, implementation, and enforcement of EU environmental legislation by increasing the effectiveness of inspec-

torate bodies and promoting compliance with environmental requirements. The general objective of ECENA is to improve the ability of the pre-candidate, candidate, and acceding countries to implement and enforce the environmental Acquis. The network will closely cooperate with Implementation and Enforcement of Environmental Law (IMPEL) and seek its involvement in the network's activities. ECENA is the successor of Balkan Environmental Regulatory Compliance and Enforcement Network (BERCEN).

Project website: http://www.rec.org/REC/Programs/rerep/ecena/

work for Accession (ECENA), while broadening the participants to include Turkey (Box 1.4).

Early on, BERCEN conducted a stocktaking review of resources available for enforcement to Environment Protection Agencies and Environmental Inspection.⁴² The review identified steps necessary to improve enforcement as the following:

- Remedy staff shortages, especially local staff with legal training sufficient to develop enforceable permits and enforcement procedures. Inspectorates reported losing 50 percent of court cases.
- Strengthen ability to advise permit holder on how to comply.
- Remedy conflicts of interest that contribute to weak permitting systems—e.g., inspectors cannot write permit conditions that they must enforce.
- Install simple monitoring equipment to detect environmental accidents and reduce emergency response time.
- Develop integrated data storage and retrieval systems to enhance mechanisms for sharing information among agencies and ministries.
- Increase staff training—including legal and practical aspects of site inspections.
- Develop formal mechanisms for cooperation across government agencies and ministries.

- Create opportunities for public participation in the permitting process.
- Evaluate compliance and enforcement to ensure that indicators used to assess performance are monitorable and used consistently.
- Strengthen environmental monitoring and reporting.
- Link budget frameworks to performance and functional needs.

On average, inspectors within the region were reported to have over 15 years experience; Macedonia reported an average of five to six years. Inspectorates have only recently begun compliance promotion; compliance checking is underdeveloped; and programmatic compliance inspection is weak. In general, there are no strategies in non-compliance response and no inspectors' code of conduct, or else these are just being introduced. Overall coordination and effectiveness with the judicial system is weak. Inspectors' level of cooperation with border control and police is mixed within and among countries.

The network provides training, exchanges of best practices, assistance to prepare reports on IPPC directive implementation, and peer reviews of national enforcement and compliance systems. Recent activities through the network have included training and awareness of EU Acquis requirements for Integrated Permitting, IPPC directive, Large Combustion Plant directive, Seveso II directive, and the EU Parliament and Council Recommendations on Minimum Criteria

⁴² Compiled Report on the Current Legal Structure and Resources Available to Environment Protection Agencies and Inspectorate in the Countries of South Eastern Europe, February 2002.

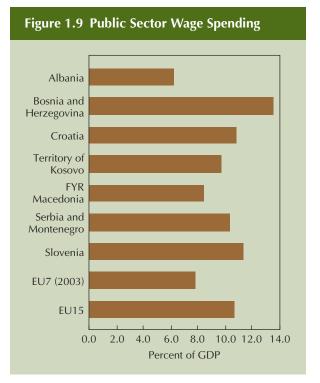
for Environmental Inspections (Appendix C). Across the region, the network is also supporting work to develop environmental inspectorate benchmarking tools for self-monitoring of performance and service efficiency.⁴³

Public Administration and Staffing

Throughout the region, the public sector dominates and in all countries except Albania, the public sector share in the economy is higher than the CEE average (Fig 1.9). Thus, the macroeconomic reform agenda has focused on public administration reform, particularly government staff reductions, which challenge environment ministries and bodies that typically have weak influence within government. Reform actions such as across-the-board staff cuts to all ministries that have been applied in several West Balkan countries have visibly harmed overall environment staffing needs, for example in Serbia, where numbers were already low for a country of its size. Macedonia environment institutions report similar pressures to cut staff and restrict hiring—even for positions specified in strategic plans. Albania regional environment agencies face staffing pressures despite inadequate levels of regional and county staff (usually five or fewer) considering the increase in responsibilities due to decentralization.

The administrative tasks required to comply with the EU Environment Acquis will need a significant net staffing increase, which is at odds with current public administration reforms. However, some efficiency gains can be accomplished through eliminating functional duplication at different levels of government, streamlining organizational structures, and maximizing reliance on externals stakeholders such as NGOs, private sector, and community watchdogs.

Evaluating country environment capacity is difficult for many reasons. First, it is difficult to aggregate the local environment staff within the region because they are often embedded in local government structures and have other non-environment duties, making it difficult to quantify time spent on environment duties. Furthermore, figures are difficult to compare across countries because the organizations vary in combina-



Sources: National authorities; International Monetary Fund; World Bank, 2005

tions of environmental functions; and it is difficult to separate administrative and political staff from those who perform core environment functions. Some adjustments were made for these factors; however, staffing figures are dynamic and at best represent a simple snapshot in time (Table 1.11). Lastly, staffing numbers are not indicative of capacity of a system if they act independently of each other. For example, Serbia has the most environment staff at the local level but its local-level staff are not well integrated with other environment bodies. In Macedonia, local-level environmental inspectors are attached to the local administration, and performance of devolved regulatory functions is reported to be weak.

Environment staff at the local level of government vary but are most typically five or less, and many small administrations have only one person who covers environment along with a multitude of other tasks. Not one West Balkan country has environment capacity at the regional or county level that compares with regional and local EPAs in some EU member states. The FBiH entity, the most decentralized part of Bosnia and Herzegovina, has some 42 environment staff spread across 10 Cantons (equivalent to the regional or county level). By comparison, most Baltic States have

 $^{^{\}rm 43}$ World Bank is supporting these efforts with BNPP Dutch Trust Funds.

Table 1.11 Staffing in Key Environment Institutions Across the Region								
Environment Staffing	Albania	Bosnia and Herzegovina	Territory of Kosovo	FYR Macedonia	Serbia	Montenegro	Croatia	
Prime Environment Ministry	57	31	36	100	118	12	51	
Environment Inspectorate	43	36	38	1244	250	2	58	
EPA	/	/	40 (2003)	29*	3	1	19	
Nature or Environment Institute	71	/	Part of the EPA	/	78	20	26	
Environment Fund	/	/	/	8	1	/	21	
Total	171	67	114	122	470	35	175	

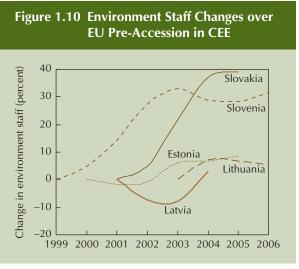
^{*}Macedonia currently has a service for the Environment within the Environment Ministry; and plans to establish an Administration for the Environment in 2007 to lead regulatory functions.

some 35 environment staff in each or approximately 10 counties.

As a result of adopting of the Acquis, all CEE countries increased net environment staff numbers. Many experienced hurdles and setbacks along this path with concurrent reorganizations redistributing environment staff across institutions; government-wide public administration reforms put pressure on budgets and staffing head count ceilings (Figure 1.10). Today, despite net increases, retaining sufficient staffing and environment skills are two of the main challenges that CEE environment institutions report. The Baltic States (with a comparable population) had a higher pre-existing number of local-level environment staff. The West Balkans in this context are more similar to Slovenia and Slovakia and should expect staffing increases at the higher end. Slovenia's pre-accession staffing changes have been compared with current levels in the West Balkan States (Figure 1.11). Macedonia—comparable in population to Slovenia, has staffing levels higher than pre-accession Slovenia.

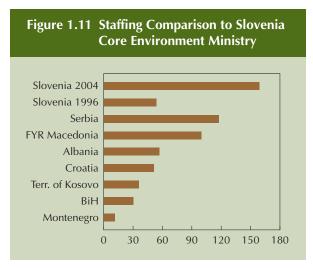
The West Balkans have a favorable educational basis for training and educating future environmental professionals. Almost every country in the region has at least one relevant university or post-graduate degree program including environment management, environmental engineering, ecology, environmental science, environmental protection, urban forestry, science and technology of the environment, biogeography, and environmental chemical technology (Appendix G). Many programs' inter-sectoral approach to training environment professionals is not yet well-established but they incorporate a strong foundation in most core sciences. Further curriculum enhancements might include integrating EU-specific policies and programs, and ensuring adequate practical exposure to EU regulatory practice for faculty and students.

All countries face large decentralization challenges; in practice most have not substantively decentralized environment functions. Macedonia, Kosovo, and Albania



Source: World Bank, 2006.

⁴⁴ Many local municipalities are in the process of nominating own staff to perform environment inspection functions.



Source: World Bank, 2006.

are most advanced and although they have passed legislation to devolve some environment functions to the local level, local government capacity to carry out the functions is uncertain. Croatia, Serbia, and Montenegro remain predominantly centralized in their approach to the environment. Bosnia and Herzegovina represent a blend—FBiH is decentralized and RS and Brcko District are more centralized.

Public Participation

Historically, most public participation in the region has been limited to comment periods that precede formal government or parliamentary approval; public involvement in early formulation of government decisions has been limited. More nongovernmental environmental organizations are advocating for a higher public involvement in key environment decisions (Figure 1.12). Government engagement and collaboration with environment NGOs is mixed, ranging from some involvement in strategic planning working groups to limited or none in decision-making. In the region, few examples exist of permanent collaboration among NGOs, private industry, and public institutions. Several countries have expedited procedures for approval of EU-related laws, which curtails the potential for public comment.

Environmental strategic planning documents (National Environmental Action Plans (NEAPs) have been many countries' first experience with broadbased public participation in environmental strategy development. Some countries are gaining public con-

Figure 1.12 Environmental NGOs - 2006 Montenegro Kosovo (UNMIK) **FYR** Macedonia Albania Croatia Bosnia and Herzegovina Serbia 0 20 40 60 80 100 120 140

Source: REC, 2006.

sultation experience through developing participatory parks management plans; capacity building and training are focused on increasing public involvement in the EIA process to better align with EU Acquis requirements. Macedonia has been proactive on including the public in preparation of key environmental laws through the use of advisory working groups comprised of the business sector, NGOs, and local government representatives.

Most EU funded environment projects include explicit public disclosure requirements; typically this means establishing a website to share project documents. Most environment ministries have established websites with information published in local languages and English. Croatia and Macedonia have the most extensive public information available on the web. Despite growing potential as Internet use and access rates increase, the Internet has not yet been used to implement or coordinate environment directives among key stakeholders—in 2006 household Internet access rates in BiH were just over 20 percent, and in Croatia, just over 45 percent.⁴⁵

The EU Acquis will require environment ministries to undertake regular proactive information sharing to raise public awareness. Although public information to educate citizens on how to protect the environment should be a key function of environment ministries,

⁴⁵ BiH Regulatory Agency for Communications, data September 2006; and July 2006 Market GFK Research Agency (Croatia)

most governments have limited experience and many lack a communications function. ⁴⁶ Where communications with the public exist, they are primarily reactive. Most countries are parties to the International Arhus Convention governing access to environmental information, public participation in environmental decision-making, and access to justice, and some have established strategies to comply, however practical implementation will require much further efforts. ⁴⁷ Greater public involvement can be effective for environmental enforcement, to change behavior, and to build a constituency for better environmental governance.

Legal Harmonization and Planning

Comprehensive environmental legislation first appeared in Europe in the 70s and since then most governments' constitutions include "access to a clean environment" as a fundamental right for all citizens. In fact, all EU citizens have the right to appeal to a higher EU law if their national law fails to internalize requirements, which underscores the urgency of harmonizing legislation and preparing administrative structures for implementation *before* EU membership comes into effect.

European governments have demonstrated strong leadership on incorporating environmental objectives into law, which means that environmental law is among the most dynamic of European bodies of law—it grows and adapts almost continuously. Legislation is shaped jointly by the European Commission and by the EU Court of Justice and a 2002 EC annual report on monitoring the application of Community law, reported that over one-third of all infringement cases were environment-related and that a "considerable number" of complaints led to questions and petitions in the European Parliament. This dynamic feedback

mechanism continues to shape the body of environmental case law.

Therefore harmonizing national legislation with the EU Acquis will help each country build capacity to integrate with the EU environmental management framework. This will maximize the cost-effectiveness of investments while ensuring a more sustainable development path. Failure to harmonize and integrate will create legal and budgetary vulnerabilities—including the potential for lawsuits in EU courts, culpability for lack of transparency, and public resistance to essential investments.

This section provides an overview of progress in the West Balkans with harmonization of environmental legislation with the EU Acquis, and on strategic planning for the environment.⁴⁹ Most West Balkan countries began harmonization before the SAP process with the EU was established. References to EU legislation can be found in many strategic planning documents dating to the 90s. Within the European Union, environmental policy and law making are led by the General Directorate of Environment, which can be considered the Environment Ministry for the European Commission. The European Environment Agency (EEA) is a separate institution that provides policymakers with information. The EEA coordinates the exchange of environmental data through the European Environment Information and Observation Network (EIONET). Membership in the EEA and EIONET is broader than EU membership and includes nonmembers such as Iceland, Norway, Lichtenstein, and Switzerland. All West Balkan States have applied for membership in these EU bodies.

The Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) directives represent some of the most important and most fundamental horizontal or cross-cutting legislation that affects all economic sectors and aims to "do no harm" and proactively integrate and mitigate key environmental concerns. The SEA legislation promotes proactive integration of environment into policies, strategic plans, and government decision-making.

The environment is an inter-sectoral and farreaching part of the Acquis Communautaire; unless it receives early and government-wide attention to prepare institutions for implementation, it could be-

⁴⁶ Some examples of targeted environment public awareness campaigns launched in the region are Kosovo's "Kosovo-my home" and Macedonia's "say no to plastic bags" campaigns.

⁴⁷ Convention on Access to Justice in Environmental Matters (1998). The EC formally became party to the convention in 2005 and adopted specific directives for its implementation as early as 2003.

⁴⁸ *Silent Spring* was a book that stimulated political mobilization and response of governments internationally to introduce regulations and controls to reduce environmental damage and minimize human impacts on the environment. Social movements and lobbying groups focused on the direct and often negative linkages emerging between human economic production, health, nature, and the environment and contributed to growing international awareness.

⁴⁹ Other recent background documents provide detailed information.

come a bottleneck that blocks other programs and progress. The EU environment legislation is participatory and inclusive-and its administration requires extensive coordination across government and civil society; it responds well to decentralization, however feedback requirements for data for management and decision-making, plus the need to aggregate and integrate information seems almost contradictory to decentralization. The Environment Acquis is a holistic body of legislation that most importantly must integrate with administrative structures for implementation. Elements of the Environment Acquis apply to other sectors through "cross-compliance;" technically, some of these apply after EU membership, but long lead times to implement some measures would suggest a progressive adoption prior to membership. The importance of environment cross-compliance in the agriculture sector is presented in Box 1.5. Crosscompliance also applies to energy, transport, industry, health, and regional development, among others.

For the past five years or more, all countries across the region have had programs that supported transposing EU environment legislation (Table 1.12). However, progress with transposition and implementation of the EU Environmental Acquis varies across the region; Macedonia, Serbia, Croatia, and Montenegro have transposed the largest portion of the major EU directives into the national legislation and are now drafting

subsidiary legislation and needs for subsequent implementation and enforcement. Albania, Bosnia and Herzegovina and Kosovo's legal harmonization is less advanced and they are still transposing the primary legislation.

All countries have years of work ahead to enact subsidiary legislation that will meet EU standards, suit country conditions, and be compatible with existing institutional roles and responsibilities. Drafting this legislation in each country is inevitably an iterative process of trial and error that must consider institutional arrangements and incorporate feedback from actual implementation.

Getting an early start on strengthening national administrative and institutional capacity for EIA to promote the absorption of EU grant funds would be highly beneficial. The EIA and SEA portions of the Acquis are applied before accession to all EU-funded programs and investments. If these directives are inadequately applied to EU-funded investments and programs, sanctions would apply, including non-reimbursement of funds to the country. So-called "ring-fencing" programs and investments can substitute for strong national capacity in the short term but this approach caused problems in CEE states during pre-accession when national practice was inconsistent with EU requirements. All countries have established basic framework environment laws, which

Box 1.5

Environment Acquis: How "Cross Compliance" Affects Agriculture

As the West Balkans harmonize agricultural policies and practices with the EU, the importance of the environment and cross-linkages with the Environment Acquis must be strengthened. Cross-linkages fall primarily under the water, waste, and soils-related directives and concern water resources management, agricultural runoff and non-point source pollution, development of a code of good (environmentally sensitive) agricultural practices, soil treatment and quality, including land application of manure and wastewater sludge, and rural water, sanitation, and household waste investments.

Waste disposal practices require special attention in the agro-food processing industries, slaughterhouses, and large-scale livestock farms (i.e., pig and poultry) which often fall under the requirements of the Industrial Pollution and Prevention Control (IPPC) and Water and Waste Framework Directives. Farmer access to and eligibility for agricultural subsidies in the EU are explicitly made subject to "cross-compliance" with EU environment policies further strengthening the importance of the environment in the rural development and agriculture. EU Policy has similarly integrated support for nature protection in private landscapes under the Common Agricultural Policy (CAP) Pillar 2, starting with the 2007–13 programming period, to further integrate the environment and agriculture objectives. This will help support payments to promote more environmentally sustainable rural landscape management. Lastly, all agriculture and farm-related investments and grant programs with EU support are subject to requirements of the EIA directive.

Table 1.12 State	of Transposition o	of EU Environme	Table 1.12 State of Transposition of EU Environmental Legislation as of mid-2007	mid-2007			
	:			BiH	i,		
	Territory of Kosovo	Serbia	Montenegro	FBiH RS	FYK Macedonia	Albania	Croatia
Framework Environment Law	2003	2004; update in progress	1996	2003 2002	2 2005	2002	1994; updated 1999; new being drafted
EIA Legislation	2004	2004	2005	Part of Env. Law + new being drafted	Part of Env. Law + some secondary legislation.	2003	2000; updated 2004
Strategic SEA	Energy Sector SEA 2005	2004	Draft Coastal SEA 2006	Part of Law on Environment	Part of Law on Environment	2004—Coastal SEA	SEA—Coastal wastewater 2006
Law for Air Protection	2004	Draft	2003 Draft	2003 2002	2 2004	2002	2004
Law for Water	2004	Draft	1995; new being drafted	2006 2006	6 Draft	2003	1995; draft update exists
Nature Protection Law	2005	Draft	1977; updated 1982	2003 2002	2 2004	2002	2005
Waste Management Law	2005	Draft	2005	2003 2002	2 2004	2003	2004
Law on IPPC	1	2004	2005	Part of Env. Law	N Part of Env. Law + some secondary legislation	ı	1
National Environmental Action Plan	2006	Drafting final stage	_53	2003 2003	3 Update adopted in 1996	1993; updated 2002; update in progress	2002
Waste Strategy	(Waste Management Plan Exists)	2003	2005	Updated 2000–2001	- (2005 Draft Waste Manage- ment Plan)	- (Waste Management Plan 1998)	2005

Note: Legal Transposition is a dynamic process, hence this table represents a snapshot in time.

33 2001 strategic document on Montenegro's sustainable development entitled Development Directions of Montenegro as an Ecological State (the "2001 Strategy") represents the basis for development of NEAP.

incorporate to varying degrees the horizontal legislation such as Environmental Impact Assessment (EIA).⁵⁰ Although Croatia has the longest experience with EIA, the country still lacks full implementation to meet EU legal requirements, especially in expanding public participation and introducing strategic environmental assessment. Recently Bosnia and Herzegovina, Kosovo, and Montenegro adopted updated EIA procedures and are still in the early stages of developing practices. Albania's EIA capacity is reported to be similarly weak.

Across the region, only Macedonia, Serbia, and Montenegro have transposed the IPPC Directive, work which is lagging behind other environment directives. However, even where primary laws exist, implementing this legislation has not substantially begun, because countries lack secondary legislation, and practical experience. In 2006, the ECENA network conducted peer reviews on readiness for the IPPC Directive; their main objective was to raise awareness among staff of environment ministries of the implementation demands and efforts required. So far, most capacity building focuses on piloting early permit applications and raising awareness among industries and the energy sector. Although environmental enforcement officials will require substantial capacity and sophisticated technical skills to administer and enforce this directive, no effort has yet gone into building capacity or training.

Across the West Balkans, strategic planning for the environment has advanced to a level similar to that of the CEE in the mid-90s when they began formal EU accession discussions. Most countries have adopted planning documents related to international treaties—Biodiversity Strategic Action Plans, National Climate Change Communications, and Persistent Organic Pollutant National Implementation Plans—required to make them eligible for international grants linked to adopted treaties. All countries and territories, except Serbia and Montenegro, have adopted National Environmental Action Plans (NEAPs) broadly covering the full range of environmental issues, and several countries are updating and preparing second-generation

Macedonia Leading on IPPC Progress

Macedonia has established a clear framework for gradual implementation of the IPPC Directive, which can be a model for other countries in the region. In the Law of Environment, an adjustment permit with adjustment plan was introduced, providing the basis for gradual compliance of the existing installations in Macedonia to the national IPPC system. The final objective of the adjustment permit is to facilitate meeting environmental standards and agree on progressive steps toward an integrated environmental permit. At least seven of the biggest polluters, have already submitted their requests to MEPP for an adjustment permit with an adjustment plan.

plans.⁵¹ Because some countries (e.g., Montenegro and BiH) have relied on external consultants to prepare strategy documents, overlapping and conflicting policies are emerging as a more integrated view is taken.

The SAA process set target completion dates in some countries for media-specific strategy documents such as waste and wastewater management, to progress with assessment of critical needs and enhance investment planning and prioritization. Other examples of strategic planning documents in the region include a 2005 Values of Kosovo Natural Heritage report; Montenegro's 2004 Strategic Framework for Development of Sustainable Tourism in Northern and Central Montenegro; and Macedonia's Vision 2008. Croatia and Macedonia, as formal EU candidate countries, are developing EU Environment Approximation Strategies. Strategic EA as a planning tool is at initial stages with several first examples being prepared in most countries, often driven by international financing to the particular sectors or supported by EU capacity building grants.⁵² Strategic EA in Albania, Montenegro, and Croatia are planned or underway, linked to coastal development planning; strategic EA in Kosovo is linked with the energy sector; and a pilot in Bosnia and Herzegovina is focused on protected areas.

⁵⁰ Montenegro is in the process of approving its first law and has relied on Serbia's law earlier.

⁵¹ Development of NEAPs is a requirement for World Bank IDA recipients however recommended for IBRD countries as well. CEE representatives in interviews cited early international support to NEAPs as a critical building block for the EU accession required strategic planning documents.

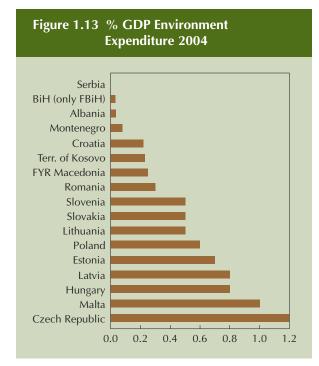
⁵² CARDS funds.

Environmental Financing

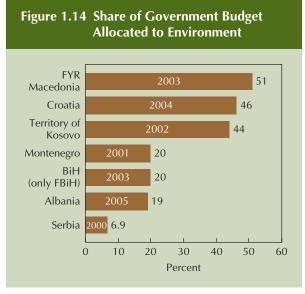
Unless West Balkan countries increase the share of their own budget devoted to the environment, their pursuit of EU membership will be impeded by lack of funding for administrative capacity, co-financing for investment grants, and operations and maintenance funds for new investments. Increased operation and maintenance spending will depend on increased cost recovery and consumer ability to pay for improved services; therefore, investments must be prioritized and sequenced, taking the following factors into account: limits of fiscal space, absorptive capacity, time constraints, and potential for environmental investments. Over time, these will all increase. The West Balkans potential to receive grant resources from the EU post accession is vast given the multiple funding programs that support the environment.

No country has yet developed a comprehensive and detailed financing strategy for environment investments similar to that of some CEE states. Such a strategy could enhance the dialogue with key stakeholders—the private sector, finance ministries, municipalities, and the EU. Countries will need to increase their attention to linkages with fiscal decentralization and municipal finance reforms to encourage the private sector and clarify the operating framework for utilities; similarly, social programs must be adapted to assist vulnerable groups with higher utility costs.

In the West Balkans, environment expenditures as a share of GDP are well below spending in new member states around their accession date, and are *extremely* low in present terms in Serbia, Albania, and Bosnia and Herzegovina (Figure 1.13). Share of the environment in government budgets follows a pattern similar to the overall GDP shares (Figure 1.14).⁵⁴ Some countries have begun to align statistics with Eurostat, which will improve future comparisons; however, no West Balkan country has yet reached full Eurostat reporting. In any case, the data presented are robust enough to conclude that environment spending levels must increase. Increases in environmental spending in new member states reflect both pre-accession and early post-accession EU grants. Over time, expenditures in new member



Sources: Eurostat, 2006; Government Budgets; UNECE, 2002.



Sources: Government Budgets; REC, 2006; UNECE, 2004.

states will increase even further to meet EU commitments for heavy investment directives and absorb EU Structural and Cohesion funds targeted at environment investments—potentially further widening the gap with the West Balkans.

Environmental expenditures cover a broad range including public administration, heavy investments such as wastewater, solid waste, air quality, and cont-

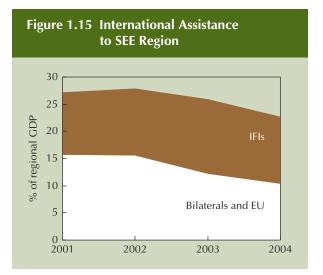
⁵⁴ West Balkans budget data are presented to indicate the shift required as countries near EU accession but cannot be compared in absolute terms given a lack of uniformity in statistical reporting, and limitations of data years available.

aminated sites, among others.⁵⁵ Utilities' operations and maintenance expenditures are generally not captured in these data as these are assumed to be recovered through tariffs retained by the utilities, which operate outside of the government budget. However since the region is not fully aligned to EU policies for cost recovery some of this might be captured through local government budget spending. Spending by environmental funds, or national development banks with budget transfers are usually reflected in these figures (i.e., consolidated for reporting). Connection and capital fees for new infrastructure investment would count as expenditure as they are spent or allocated by government bodies.

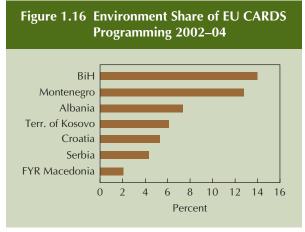
The overall share of international assistance to the region is generally on the decline (Figure 1.15) as the post-war reconstruction aid tapers off, growth and income levels improve, and the region embraces a future with European Union as their primary donor partner. The EU grant programs generally favor the environment but internal priorities of each country drive individual needs. Figure 1.16 examines the relative priority environment has received so far through EU CARDS national funds: ranging from a low of 2 percent (Macedonia) to a high of 14 percent (Bosnia and Herzegovina). Even the upper range is low considering the importance of environment in EU grant programming in post accession funds.⁵⁶ In 2007, all West Balkan countries gain access to the EU's new Instrument for Pre-Accession Instrument (IPA), with a capacitybuilding window open for environment proposals similar to the former CARDS grants. Macedonia and Croatia can additionally access the investment window of IPA, with financing for heavier environment investments similar to the former ISPA and PHARE grant programs.

Regional initiatives, such as the Priority Environmental Investment Program (PEIP) for South Eastern Europe, provide an approach to investment project pipeline development (Box 1.6).

Environmental funds are not required by the Environment Acquis and are not a core government function but governments are responsible for pro-



Source: World Bank, 2006.



Source: EU CARDS Program – Financial Statistics and Annual Programs. 57

moting environmental investments and most funds are established to do this. However strong budget support is essential because environment funds never meet all environmental investment needs.

Croatia, Macedonia, and Serbia have environmental funds and other West Balkan states have plans to develop them in an attempt to steer more government resources to environmental investments. Initially Macedonia's environment fund was independent; later it was moved to the Ministry of Environment and consolidated with the Ministry budget.⁵⁸ Croatia and Serbia

⁵⁵ Eurostat and OECD environment expenditure methodologies are consistent, with OECD PAC methodology being a simplified version of Eurostat SERIEE (See Appendix H for Eurostat definition of Environmental protection expenditure).

⁵⁶ It is possible that the environment received a higher share of bilateral grant funds so there could be a substitution effect accounted for in the CARDS programming efforts.

 $^{^{57}\} http://ec.europa.eu/comm/enlargement/cards/index_en.htm$

⁵⁸ Contrary to expectations and experience in CEE–Macedonia's experience with this consolidation has resulted in a loss of transparency and reduced funding to the environment. Their experience underscores the importance of strengthening national budget systems, and the transitory role funds may have.

Box 1.6

Priority Environmental Investment Program (PEIP) for South Eastern Europe

This program was developed within the framework of the Regional Environmental Reconstruction Program for South Eastern Europe (REReP) to assist national and local governments to plan environmental investments, prepare projects, and find financing for implementation. The program facilitates strategic national environmental investment planning: it helps identify, prioritize, formulate, and prepare projects that face national resource limitations. PEIP supports national environmental investment planning in SEE, through institutional

strengthening and capacity building. The work covers the air, water, and waste sectors, which are priority environmental heavy-investment needs in the region. The Program provides information to the donor community. The Regional Environmental Center for CEE (REC) manages and implements activities under the PEIP, with the contribution of EU CARDS program.

Project website: http://www.rec.org/REC/Programs/REREP/PEIP/default.html

have extra-budgetary funds outside the prime environment ministry with government representation on their boards. Both funds collect revenues from environmental fees and taxes, and Serbia's environment fund collects a portion of all privatization proceeds. Appendix I presents an overview of some of the environmental funds in the CEE states for comparison. Revenues for these funds vary but typically consist of environment-related fees and fines including resource utilization fees, pollution and gasoline taxes, carbon taxes, privatization proceeds, and debt-for-environment swaps with donors. The EU CARDS projects in some countries have supported proposals to establish new environment funds including in Bosnia and Herzegovina, Albania, Kosovo, and Montenegro.

Environmental funds are most useful when focused and time-bound, for example, in niche activities such as administering an international debt-for-environment swap, remediation of former state-owned properties, or brokering carbon finance projects. Therefore, governments must examine trade-offs: a fund requires substantial capacity building, which has high opportunity costs, especially in countries where environment capacity is already weak, as is the case with most of the West Balkans. Furthermore, the usefulness of a fund must be evaluated in the context of a comprehensive national environment strategy for investment financing. For example, in CEE, the more successful funds were later restructured, strengthened, and used to administer EU grants, but because environment funds are most effective in the short- to medium-term, several new member states are now designing exit strategies for their funds.

In fact, experiences have been mixed among the many new member states that set up environmental funds to manage environment revenue streams within and outside of the budget. Development partners such as OECD have developed methodologies to assess the operations of environment funds. The OECD assessments revealed a lack of transparency and poor governance, which outweighed the benefits of secured funds for environment investment needs, and a greater flexibility for investment planning de-linked from more rigid national budget cycles. The relative importance of these funds in some cases later became more limited when alternative structures were established for EU Grant programs.

In most countries the central budgeting process lacks a clear and transparent framework for performance-based budgeting, thus the amount of central budget support required to sustain environment functions is unclear. Explicit links between performance and budget would improve financial support and could demonstrate environment agencies' ability to cover some of its costs (e.g., an IPPC permit fee could be based on staff cost to prepare it). Furthermore, an overall reform strategy should include policies to promote a wider role for the private sector and public-private financing of environmental investments. Heavy infrastructure tariffs need to consider affordability and social impacts to be sustainable in the longer term.

International Cooperation

The global dimension of environmental challenges is reflected in numerous international treaties and conventions. The EU Environment Acquis has directives linked to global conventions, which detail EU-specific policies for compliance (e.g., PCB Directive, and Carbon Emission Trading Directive). Furthermore, acceding countries and EU members must ratify and be parties to the same international conventions as the EU, and integrate the international requirements into their national legal frameworks.

Trans-boundary cooperation—particularly to manage air and water as global public goods—has meant that the environment is a prime vehicle to re-establish ties between countries. Around the region, countries are developing trans-boundary projects, especially in water and nature protection, but the explicit support of governments can strengthen sub-regional cooperation. The West Balkans do not maintain regular regional ministerial-level cooperation on the environment, despite ad-hoc ministerial meetings on specific issues.

Since 2000, sub-regional cooperation on the environment has taken place mainly at the working level under the REReP. The European Commission established this program, which operates through a Secretariat at the Regional Environment Center (REC) in Hungary, with local support through REC offices in SEE States (Box 1.7). Most participants comprise senior technical staff from Ministries of Environment who define priorities and exchange information. The ECENA network was formed under this umbrella to cooperate specifically on training and capacity building for environmental enforcement, as mentioned earlier. This program should eventually fully embed

its management and governance in the public administration work programs to be sustainable. A good practice case study recommended by CEE states is the Baltic Environment Forum; its success stems from close integration with national capacity-building strategies. (Case Study No. 4 in Appendix E)

Trans-boundary cooperation in the region has advanced predominantly on shared water resources with support from the Global Environment Facility. Participants developed shared management strategies for the Black Sea-Danube (Slovenia, Croatia, Serbia, and Bosnia and Herzegovina) and Mediterranean Basins (all SEE), and initiated specific projects on trans-boundary lakes and rivers including Lake Ohrid (Albania/ Macedonia), Lake Prespa (Macedonia/Greece), Lake Shkoder (Albania/Montenegro), Lake Perucac and the Drina River (Serbia, Montenegro and Bosnia and Herzegovina), Neretva River (Bosnia and Herzegovina and Croatia), and the Sava-Drava River Basin. Most projects embody an integrated approach to land and water management. Trans-boundary cooperation on nature protection has also progressed well; examples include Lake Shkoder (Montenegro, Albania), West Stara Planina (Serbia, Bulgaria), and Neretva Delta (Bosnia and Herzegovina, Croatia). New proposals and projects are emerging, including a proposed Balkans Peace Park in the mountains of Montenegro, Albania, and Kosovo; plans for a trans-boundary hiking trail connecting National Parks in Croatia and Bosnia and Herzegovina; and trans-border cooperation at the Iron Gates National Park (Serbia and Romania).

Box 1.7

The Regional Environmental Reconstruction Program

The Regional Environmental Reconstruction Program (REReP) is an initiative under the Stability Pact for South Eastern Europe, shaped by Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Former Yugoslav Republic of Macedonia, Romania, Montenegro, and Serbia and Kosovo (currently under UN interim administration). A task force guides its implementation: the task force comprises South Eastern Europe (SEE) ministers of environment, donors, international organizations, institutions and NGOs. Regional Environmental Center for CEE (REC) was mandated as Secretariat of REReP, with the contribution of EU CARDS program. The SEE ministers launched the

program in 2000. In 2001, the REReP mechanism was revised to align with the rapidly developing Stabilization and Association Process (SAP), which reflected the changing political landscape; REReP became a vehicle to assist SEE countries in their long-term goal of EU integration. The REReP priorities are building institutional capacity, supporting environmental civil society, devising regional cooperation mechanisms and cross-border projects, and reducing environmental health threats and biodiversity loss.

Project website: http://www.rec.org/REC/Programs/REREP/

Sub-regional cooperation can expand to include sharing environmental data, particularly related to enforcement and cooperation controlling illegal crossborder movement of waste; promoting policies to share services of high capital investment cost facilities such as hazardous waste incinerators and certified laboratories; coordinating support for legal transposition of the Acquis; and sharing long-term training programs for environment professionals. Ultimately, harmonized institutional structures will increase transboundary cooperation, and sustain environmental Acquis implementation.



2

Lessons from CEE Countries

The process of EU approximation required countries to transpose the EU environmental legislation and establish the institutional structures to implement and enforce it; for the CEE countries, enforcement posed the greater challenge.

en Central and Eastern European (CEE) countries agreed to share their hard-won lessons acquired during the process of adopting the Acquis Communautaire (AC), which entailed considerable institutional and legal reform. ⁵⁹ The process was unfamiliar and stakeholders were many and diverse. Therefore, it was inevitable that resources and time would be lost as these countries struggled to organize and develop the institutional arrangements and capacity to carry out the requirements of the AC. This chapter presents findings from a study of the ten CEE countries undertaken by the World Bank specifically to help the West Balkans with their transition process.

Lessons from CEE Experience

- Human resources capacity was the biggest challenge because existing staff skills and competencies did not match those needed. As a result, frustration levels were high during pre-accession as staff learned by doing but this trial-and-error process led to substantial capacity increases and human resources became the area of greatest improvement. Staff training in the context of EU projects was the most effective means to build capacity. Study tours were not seen as effective, however exchange with counterpart professionals in EU countries was important.
- **Develop institutions early** and give them clear mandates, successive reorganizations created confusion, wasted resources. Avoid duplication and overlap of responsibilities by coordinating with environmental institutions all public administration reforms undertaken for the environmental Acquis—including decentralization.
- Pursue coordination at all levels through regular meetings of interministerial working groups. Coordination among central and local levels of government should be given a higher priority.
- **Pursue public participation** through organized trade groups, chambers of commerce, umbrella NGO organizations and so forth. Local governments will require additional resources to carry out their responsibilities for public participation.
- **Test and pilot implementation** prior to transposition, if countries cannot implement legislation as written they may need to re-transpose.

⁵⁹ New EU member states-Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia.

Also, involve legal and technical specialists in translation of EU legislation from the beginning. The biggest challenges were adapting and implementing the laws, among which waste and water directives were the most difficult.

■ Environmental funds are most useful when focused and time-bound because a fund requires substantial capacity building, which has high opportunity costs, especially in countries where environment capacity is already weak, as is the case with most of the West Balkans.

The study is based on 94 interviews, 19 focus groups, and a survey of 381 environmental institution staff⁶⁰ and covers processes followed by environmental staff at different levels in each country, plus other key stakeholders (private industry and NGOs). Participants knew that the objective of the study was to provide guidance to prospective member states. Therefore, their comments include explicit guidance for West Balkan countries—institutional change, catalysts, and obstacles.⁶¹

Transposition Strategies

The process of EU approximation required countries to transpose the EU environment legislation and establish institutional structures to implement and enforce it; for the CEE countries,⁶² enforcement posed

the greater challenge.⁶³ The EU environment Acquis includes over 200 legislative acts. The institutional assessment focused on the following eight broad categories: integrated pollution prevention and control (IPPC); waste; water; ambient air quality assessment and management; natural habitats of wild fauna and flora; environmental impact assessment (EIA), and strategic environmental assessment (SEA).

Drivers for change

In most countries institutional change occurred ad hoc. Other factors that shaped the reform process included EU progress monitoring; simultaneous public administration reforms; obligations imposed by international conventions; and activities of international organizations including twinning and bilateral projects. In most states, political events drove reforms, for example Estonian respondents noted that changes in Ministers was most significant. External EU audits tended to trigger responses in most countries, particularly as accession deadlines approached.

"Transposition was the easiest part of the process, implementation was more difficult as there was a lack of communication about how implementation should be taken forward."

Interview with Baltic Environmental Forum
November 2005

Test and pilot implementation first

According to CEE focus groups and interviewees, transposition presented no major obstacles other than the burden of the terminology and the extent of legislation. However, the process was not problem-free. There were unclear procedures for drafting legislation; massive document processing; and vague and complex terminology exacerbated by poor translations. Mechanical transposition of EU legislation frequently failed to take into account country-specific contexts and Lithuanian respondents noted that legis-

⁶⁰ Environmental officials comprised the main target groups. The consultants' local offices (REC) identified these officials and key stakeholders who were involved in and knowledgeable about the process. Focus groups results guided the content of the survey questionnaire, and in-depth interviews amplified or clarified results from focus groups and surveys. Focus groups were 5 to 19 participants (See Appendix K).

⁶¹ In several focus groups in different countries, participants were emphatic that they did not want their colleagues in the West Balkan countries repeating the same mistakes that they had made.

⁶² Formal negotiations of the environment chapter of the Acquis Communautaire opened for the first applicant countries near the end of 2000. In March 2001, Slovenia became the first applicant country to close provisional negotiations on the environment chapter. By July 2001, the Czech Republic, Estonia, Hungary, and Lithuania had concluded negotiations. Poland followed in October 2001; Latvia closed three weeks later, and Slovakia in December 2001. All countries obtained derogation periods, 62 for the more difficult and investment-heavy directives such as Large Combustion Plants and Urban Wastewater. The number of directives for which derogation periods were obtained and the length of those periods vary among the CEE countries.

⁶³ Danish Environmental Protection Agency, "The Environmental Challenge of EU Enlargement in CEE," Thematic report, 2001.

Lessons from CEE Countries 37

lation that was not adapted to local circumstances created implementation problems. The cut-and-paste approach created considerable delays because legislation had to be amended, particularly after implementation was tested under local conditions. Respondents stressed the need to test and pilot implementation prior to transposition to avoid having to re-transpose if legislation cannot be implemented as written. New member states have undertaken frequent amendments of transposed legislation and CEE countries advised the pre-accession states to examine the reasons behind those changes and learn from mistakes made in initial transposition.

Human resources capacity

In Estonia, the intensity of the transposition period and the overwhelming volume of legislation contributed to staff burnout and attrition. Czech respondents stressed that legal and technical specialists should be involved in translation of EU legislation from the beginning to avoid delays.

"Precipitous, insufficiently coordinated transposition of the Acquis Communautaire lead to non-integrated, unclear, complicated and low-quality transposed legislation. It is necessary to amend this legislation almost immediately after it comes into force, sometimes even several times. Little time and effort was spent on preparation of practical application of new legislation (including related secondary legislation). This should be done well in advance before legal acts come into force."

MOE TERRITORIAL STATE ADMINISTRATION REPRESENTATIVE, OSTRAVA, CZECH REP., JANUARY 2006

Waste and water directives are most challenging

Most respondents considered the directives connected with waste and water most challenging for transposition and implementation (Box 2.1). Nearly equal percentages considered waste directives difficult (38 per-

cent) as water (37 percent), primarily due to the need to involve different institutional actors. Of the survey participants who considered financial and technical resources overall problematic, the largest share (39 percent) singled out waste directives as insufficiently financed. According to survey respondents, waste and water were also the directives for which the established coordination mechanisms worked. Focus group reports and interviews said that early recognition that water directives cross sector lines facilitated establishing effective mechanisms.

"If I had to go through the process of transposing the EU legislation again I would include more human resources, make more comprehensive plans, and take more time. I would also prepare more thoroughly, have more extensive and wiser discussion for state legislation. More cooperation with regional authorities would also be needed."

INTERVIEW WITH STOCKHOLM ENVIRONMENTAL INSTITUTE, DECEMBER 2005

Negotiation

Although transposition and implementation are primary, respondents underscored negotiation. Czech respondents noted the importance of having negotiators in Brussels representing the MoE who have sufficient information about the national situation vis-à-vis each directive and are well prepared; otherwise, unrealistic deadlines might be established for compliance. Lithuania respondents highlighted changes that occur over the course of negotiation—negotiators had originally requested eight transitional periods; they withdrew their request for five and shortened the remaining three.

Preparedness and realistic timelines

Focus groups stressed the importance of preparedness throughout the accession process, beginning with realistic timelines. Some interviewees noted that the tendency to focus on transposition as the main challenge obscured other issues such as

Lithuania—Striving to Implement Water and Waste Investments

Lithuania's Ministry of Finance is the central coordinator for EU funds; while the Ministry of Environment is the intermediary body for ex-ISPA/Cohesion/ERD Funds (€575 million) with responsibility for contracting EU environment grants in its Environmental Projects Management Agency (EPMA). Regional investment strategies for water (covering five River Basins) and waste (covering 10 counties) were developed to respond to the Cohesion Fund larger investment sizes (minimum €10 million). Municipalities borrowed from commercial banks for ISPA grant cofinancing. IFI co-financing was very limited, as it was considered complicated with stringent requirements for investment sustainability. Cost overruns in implementing the Cohesion Fund projects turned out to be a major problem. Initially, disbursements were very slow, but are starting to pick up, as more projects reach construction phase.

Key Problems: Poor investment planning; weak project management and procurement capacity.

- Un-realistic performance indicators became embed in financing agreements that were difficult to amend, and the lack of sensitivity analysis on population trends resulted in over-dimensioned designs.
- Failure to resolve land ownership constraints in a timely manner delayed certain network extension investments.
- The low level of involvement in planning by municipalities and the lack of accountability resulted in paperwork backlogs (EIA, construction permits, public consultations, etc.).
- Numerous complaints from bidders led to delays.
- The poor quality of detailed designs contributed to cost overruns and delays, and accession progress led to rapid price escalation in the construction sector.
- The tendered workload was too large for local consultants and not attractive for international firms.

• The lack of time invested in the EPMA's relationship with final beneficiaries hindered implementation progress.

Hindsight Lessons: Flexibility; Project Management; Collaboration: Use IFIs to help build capacity

- Realistic planning is needed to implement projects.
- Legal documents and monitoring indicators should be specific but not too restrictive and allow a reasonable degree of flexibility to adjust for changing circumstances.
- Proper procurement planning is critical and should take local circumstances into account.
- Building partnerships between final beneficiaries and the central "bureaucracy" is critical to ensuring proper ownership of projects.
- Institutional capacity building at both central and local levels is important, as the lack of institutional skill leads to poor implementation quality.
- The wider involvement of IFIs in EU-financed projects would have been beneficial, as their expertise can help in developing and managing investment projects.

Adjustments Made: Decentralize; Accountability; Prioritize; Scale down

- Responsibility for procurement is gradually being decentralized to final beneficiaries with the EPMA's role changing to over-sight and no-objection authority.
- Laws are being amended to promote municipal accountability for EU grant investment performance.
- There is tougher prioritization of the remaining investments and funds, and the government is now
 only partly covering cost overruns, based on costsharing agreements with municipalities.
- Machinery and other operating equipment are being excluded from contracts where it is possible to lease.

capacity and coordination. The interviews and focus groups said to treat delays as opportunities for "getting it right," that is fine-tuning legislation to country circumstances and strengthening implementation capacity. Box 2.2 describes the lessons learned from delays in Hungary.

Institutional Reforms

In most cases, countries undertook several ministerial reorganizations in attempts to adapt to the Acquis. There were mergers and separations among sectors such as energy, transport, and forestry. All survey coun-

39

Box 2.2

Establishing Capacity Needs for EU Nature Conservation Regulations

Establishing NATURA 2000 Network/Implementation of the Birds and Habitats Directive

During accession to the EU, Hungary increased the territory under protection from less than 10 percent to 21 percent. A government decree, announcing Natura 2000 sites was issued late in the accession process (October 2004), prompting the EC to issue warnings that they might withhold the use of Structural Funds. Despite this delay, the Commission ultimately gave the network a positive evaluation. The delay was due to weak cooperation among ministries, and lack of a suitable database, funding, communication, and political will. An extensive group of experts and institutions was involved (government, academia, and NGOs).

Lessons Learned

- start early
- use existing structures and programs
- involve NGOs for data collection and local level communication
- allocate sufficient funding
- establish an official coordination body
- engage experts from other EU countries
- use pre-accession funding mechanisms for capacity building and the background data collection
- have a good land register for easy identification of holdings within Natura 2000 sites
- develop compatible funding mechanisms with agriculture programs
- mobilize political will
- ensure early cooperation among ministries (e.g., inter-ministerial body)
- allow sufficient time to inform stakeholders about implementation and allow for debates

tries have a ministry responsible for environmental issues and a supporting body (usually the implementing agency/ies). Four countries (Czech Republic, Estonia, Hungary and Poland) lack an environmental agency and delegate implementation to supporting institutions. In most cases, the Ministry of Environment deals only with environmental issues (including water) except in Slovenia, which merges environmental issues and spatial planning. Romania merged agriculture and environment and Slovenia merged energy and environment; however, these mergers failed to yield the envisioned benefits and were later reversed. All CEE states fully consolidated water under the prime Environment Ministry, except the Czech Republic, which divides specific water functions. However aspects of water quality are usually shared with other ministries (e.g., Ministry of Health is responsible for drinking water quality). In general, during reforms, four major types of new institutions or units were created.

- EU pre-accession coordination—a separate EU integration unit and EU departments at MoE
- Implementing institution supporting MoE— Environmental Agency

- Specific units related to implementation of the more difficult directives—such as a Waste Management Centre, IPP Centers, EIA Centers, etc.
- Funds management–dedicated units or agencies

Transfer of responsibilities among ministries

A key message from the institutional stocktaking was to establish institutions early and give them clear mandates. Reshuffling responsibilities during the accession process was detrimental to meeting Acquis requirements. Six countries reported a transfer (Table 2.1). Two countries allocated Environment ministry functions to other ministries. Estonia transferred planning to the Interior ministry, which resulted in losing the planning law requirement to perform an EIA. Since an EIA is a key requirement under the environment Acquis, the procedures had to be amended to reintroduce EIA. In Latvia, reforms allocated regional development, construction, and tourism to other ministries, narrowing the focus of the Ministry of Environment. No loss of core function was attributed to this narrowing of focus.

Table 2.1 CEE Government-Wide Institutional Reforms							
Country	Water	Spatial Planning/Regional Development/Construction	Energy	Forestry			
Estonia		•					
		(planning was shifted to the Ministry of Interior)					
Hungary	•						
Latvia		•					
		(regional development and construction was shifted to other ministries)					
Romania	•			•			
Slovakia	•						
Slovenia	•	•	•				

"Responsibility for fisheries policy is divided between the Ministry of Environment (resource policy and fishing fleet) and the Ministry of Agriculture (structural policy, market policy). MoE Fisheries Department was renamed the Fishery Resources Department. Administrative responsibility for the Fisheries Information System (FIS) is being transferred from the Environmental Inspectorate to the Fisheries Resources Department within the MoE. A joint working group of the Ministry of Environment and the Ministry of Agriculture has been established for the development of the FIS."

INTERVIEW WITH ENVIRONMENTAL SERVICES DEPARTMENT OF HARJU COUNTY, ESTONIA, DECEMBER 2005

Slovakia and Hungary transferred water management responsibilities to their Ministries of Environment, which improved coordination and facilitated data exchange and task division. Romanian stakeholders reported that the merger of Environment and Agriculture was unsuccessful because the administrative burden increased and the staff size decreased; ultimately this merger was reversed (Box 2.3).

Ministry of Environment should lead

Respondents said the most effective institutional structures for the transposition and implementation

of EU environmental legislation housed key responsibilities under the Ministry of Environment, coupled with effective coordination mechanisms with other Ministries when their technical knowledge, expertise and data resources were required to inform specific decisions. Typically an implementing agency (Environmental Agency), an inspectorate, and regional and local environmental departments support the MoE.

New institutions and responsibilities can overburden the system

Establishing new institutions and units and expanding the enforcement role of existing institutions tended to create the strongest pressures on the system and to be the most difficult to implement. New institutions and departments included EIA Centers in Slovakia (Box 2.4) and Latvia, the Agency for Integrated Pollution Prevention in Czech Republic, a Best Available Technology (BAT) Centre in Poland, a Waste Centre in Czech Republic, and a Chemical Bureau in Slovenia. Most often new institutions were introduced to strengthen a function known to be weak. Whereas environmental regulation enforcement had been negligible during the socialist period, the EU and Environment Acquis emphasized enforcement, which raised the responsibilities and profile of the inspectorate function. However, this shift tended to occur without sufficient recognition of the burden that it placed on the municipality. In identifying

Trial and Error of Institutional Reforms—Romania

Environment, Water, Forestry, and Agriculture

Merging responsibilities at the Ministry level for environmental policy and management with responsibilities for coordinating a key economic sector (agriculture) led to confusion and contradiction rather than synergies and proved to be too large to manage. In 2003, Romania merged the former Ministry for Water and Environmental Protection (MWEP) and the former Ministry for Agriculture, Forests, and Food to become MAFWE. In parallel, the government transferred all Local Environmental Protection Agencies (LEPAs) to MAFWE and the National Environmental Guard (Environmental Inspectorate) to National Authority for Control (NAC). The new

administrative structure proved to be too cumbersome to deal with the heavy workload required by pre-accession negotiations process of both agriculture and environment. Limited staff shouldered the heavy workload across technical Departments in the enlarged Ministry and counterparts in the 41 LEPAs. In parallel, Romania created Regional EPAs, which required additional financial support and coordination capacity. In March 2004, the European Commission issued a severe warning ("red flag") on institutional issues, which prompted the government to separate the Ministry of Environment and Water Management from the Ministry for Agriculture and Forests again.

challenges, environmental officials distinguished between new requirements and those that were modifications of existing functions. In some CEE countries (e.g., Hungary) EIA was already done at the local level, and the EIA directive required more extensive public participation and information disclosure and data sharing. The waste directive also introduced new approaches related to new infrastructure, new

waste packaging, waste reduction, recycling requirements, and requirements to collect and share disposal data with national authorities.

Municipal capacity varies

Municipal capacity is most often related to size. Respondents from larger cities felt that they should

Box 2.4

Strengthen Institutional Capacity and Public Participation for EIA

Environmental Impact Assessment Unit (EIA Unit) at the Ministry of Environment and Documentation Centre for EIA, Slovakia

In 1994, Slovakia created an EIA unit at the Ministry of Environment to manage and regulate the process of EIA at the national, regional, and local levels. In 2001, to elevate the importance EIA, the State Secretary (deputy minister) assumed direct supervision of the unit. This increased EIA recognition, influence, implementation and enforcement. From January 2002, a "complementary unit" dealing with EIA information, the Documentation Centre for environmental impact assessments was established under support of a twinning project at the Slovak Environmental Agency and

its seven regional centers. The Center enabled systematic archiving of all processes and impact statements, which were gradually made public through a webbased information system. The center kept records, and delivered outreach, training, and seminars.

Creating a single-mission unit can be key to implement critical environmental tools and reforms. The unit had symbolic and actual power to implement and interact with other ministries and other agencies. Separating data and information collection from managing and regulating environmental impact assessments was important and delegating responsibility to a subordinated Slovak Environmental Agency helped to streamline responsibilities and increase efficiency.

carry out more responsibilities under the environmental laws (some wanted more air and more permitting authority); while those from smaller cities struggled to meet new requirements, especially related to new infrastructure commitments.

Coordination Mechanisms and Intra-Government Communication

Failure to coordinate Acquis reforms with decentralization reforms caused confusion

Coordination was a dominant theme in focus groups, and nearly all of those who ranked it problematic on the survey were concerned with the local—level coordination. Bulgarian focus groups described inadequate coordination among ministries and municipalities on implementing legislative and administrative acts at the local level and attributed it to "too few resources and too many responsibilities." Among survey respondents few ranked this issue as one of their top three problems.

Lack of coordination created duplication of responsibilities

Nearly half of survey respondents discovered that another department or organization had duplicate responsibilities to implement environmental legislation. Coordination with respect to drafting policies was little better at 38 percent. Legislation and top-down decision-making were the principal factors in determining departmental responsibilities; neither international organizations nor available funding were decisive factors, according to survey respondents (neither the EU).⁶⁴ Participants identified successful inter-ministerial cooperation (Hungary, Romania) and successful working groups (Slovakia). Throughout approximation, senior political commitment was critical for co-operation and advancement in progressing plans and projects.

"There was cooperation with the other ministries—social, interior, agriculture—on topics where environment was involved so that money from the other funds could be used for environmental purposes. At the beginning there were misunderstandings among departments of ministries, each ministry looked at their area narrowly and did not understand that [the] environment . . . is necessary to integrate."

INTERVIEW WITH STRATEGY AND INVESTMENT DEPARTMENT, MOE, ESTONIA, 2005

Coordinate the inspectorate, regional authorities, and local implementing partners

Facilitating the involvement of these units would result in better human resources capacity, better legislation drafting, implementation, and planning. According to focus groups, coordination with new staff at regional or lower level administrations (between environmental inspectorate and regional authorities) was particularly difficult. Government departments for European integration and their transposition lawyers failed to involve key implementing institutions (e.g., inspectorate, regional authorities) in preparing for approximation. However, in Hungary and Slovenia, respondents reported effective coordination with central authorities through networks of municipalities.

Reaching internal government consensus slowed transposition

Focus groups said they underestimated the time required to agree on the framework (legislative rules for planning) and to handle the administration of draft legislation. Similarly, lack of ministerial cooperation at the beginning of the approximation process hindered progress. Most countries experienced problems with sharing information and overlapping responsibilities. However, the capacity to tackle these issues improved over time largely due to increased confidence and familiarity with processes established to improve coordination.

⁶⁴ As noted above, the EU does not dictate the specific institutional forms to be adopted. Respondents noted that advice provided through twinning programs tended to reflect the country of origin more than advice received in other EU programs.

43

Coordination requires senior level interventions

Most discussions on reconciling different ministerial interests were begun at the departmental level with technical staff, which was time-consuming. Respondents were frustrated by overlap on issues such as water, which required coordination between agricultural and environmental ministries.

"The experience with the consultation process is not positive as often other ministries such as industry or agriculture disagree with the proposal and long negotiation sometimes brings compromise. If compromise is not reached on the level of written consultation, negotiation then starts on the level of departmental directors, then deputy ministers, and finally ministers. In case of disagreement on the highest level, the government cabinet makes the decision or returns the draft for further work."

FOCUS GROUP DISCUSSIONS IN CZECH REPUBLIC, SEPTEMBER—OCTOBER 2005

Inter-ministerial groups are effective to coordinate information, decision-making, and networks

For example, Bulgaria developed specific organizations to coordinate water issues, which cut across sectoral lines—Basin Working Groups, High Water Consultative Council, Inter-departmental Commission for Plans and Programs Assessment. These institutions involve representatives of other organizations with water responsibilities. In the Czech Republic, the Ministry of Agriculture handles water management planning; Environment handles water quality, and a national commission for water planning includes representatives from both.

External communications were more problematic

Over half of respondents that considered communication an important issue said communication with other institutions and ministries was the most problematic. Internal communication within institutions or departments was rated effective, and formal and

informal communications among departments was rated adequate or high.

Coordinating public administration reforms

Most CEE countries carried out public administration reforms (driven by the Nomenclature of Units for Territorial Statistics requirements and decentralization). The central government transferred responsibilities, particularly for implementation and public participation, to municipal governments and/or to regional and county-level state administrations. Many respondents thought that administrative reforms created problems, confused tasks and responsibilities and presented an obstacle to institutional changes and planning for institutional strengthening by employees. For example in Czech Republic the reform resulted in confused responsibilities, staff relocation (shifts to Regional Authorities), and staffing shortages. In Poland for example, administrative reform resulted in an overlap in responsibilities.

Central to local government communications

In Poland, the Czech Republic (see below), Lithuania, and Hungary, interviewed representatives of local and regional authorities considered the central government's communication with them inadequate and unclear. In Lithuania, municipal representatives noted that reporting requirements and overlapping responsibilities with regional environmental protection departments remain unclear.

"MoE is failing in their role—the individual MoE divisions do not communicate with each other, which is affecting the communication towards regional authorities. Example: Landfills are subject to the IPPC Directive, but waste division communicates only with media based experts in relation to implementation of EU legislation. During EU legislation transposition the assessment of practical implementation is not sufficient and therefore unsolvable problems arise."

Interview with a representative of a regional authority in Jihočeský kraj, Department of Environment, Agriculture and Forestry, December 2005

Human Resources

Reconciling the human resources gap strengthens overall capacity in the longer term

Almost 60 percent of respondents identified human resources as the single most problematic issue during pre-accession and accession. Amay existing staff lacked specialized experience and skills in technology, language, law, international tendering, and knowledge of EU integration and bureaucracy, and the volume of work created burnout and attrition among experienced staff. However, on the plus side, the EU accession process builds capacity because specific human resources gaps are apparent only as the process unfolds. Therefore, more than half of survey respondents also identified human capacity as the area of greatest improvement.

"There was compulsory training in English based on governmental decree which was paid primarily from the state budget. The decree requested certain level for different positions within few years; but as the higher ministerial management could not comply with the requirements, the government decree was canceled 1.5 year after it came into effect. The English language tests were organized by the British Council. In terms of general issues the majority of MoE technical and legal staff undertook the European Minimum Course."

CZECH REPUBLIC FOCUS GROUP DISCUSSION

Specialized knowledge gaps emerged early in the accession process

A substantial gap existed across countries in internal staff knowledge of EU requirements and English language skills. Other skill gaps included communication, environmental science, international tendering, law, management, negotiation project preparation and implementation; also technical expertise levels varied

during approximation. Sixty percent of respondents that identified human capacity as a challenge ranked their institution low on expertise in EU legislation, and almost 50 percent on language skills capacity.

Building capacity

Most respondents reported that capacity building was accomplished primarily by hiring new staff, and through various EU learning opportunities—training projects and programs, workshops and seminars; study visits, initiatives and networks; and internal and international training events. More than 50 percent of survey respondents said that EU project-related training was considered most effective, followed by internal training. Over two-thirds of survey respondents perceived EU PHARE programs as effective or effective as a source of external expertise. Focus group participants noted that most capacity-building occurred through trial and error and learning-by-doing.

Training caveats

Strategically planned training was virtually impossible due to unclear division of responsibilities, and significant levels of staff movement related to public administration reforms. Focus group respondents cautioned that EU twinning programs tended to provide experts who were often unprepared and whose knowledge of local conditions was limited. Study tour participants were enthusiastic but only 11 percent of survey respondents thought study visits to more mature member states provided effective training.⁶⁷ West Balkans civil servants are keen to participate in external study tours, events, and EU courses and workshops, but less than 13 percent of CEE survey respondents rated these "most effective." One effective study tour example is discussed in Box 2.5.

⁶⁵ Thirty-four percent of all respondents ranked this first in difficulty, and 57 percent of those who identified human capacity as problematic ranked this issue first.

⁶⁶ Originally financed by the EU as "Poland and Hungary: Assistance for Restructuring their Economies," the program was extended to other pre-accession states. In the West Balkans, the CARDS program (Community Assistance for Reconstruction, Development and Stability in the Balkans) provides similar support.

⁶⁷ For example, a Bulgarian MoE staff member noted that during a Danish study tour, he visited installations and equipment that he was familiar with only from study.

Lessons from CEE Countries 45

Box 2.5

Technical Assistance Supporting Capacity Building for IPPC Directive—Latvia

Project for Industrial Pollution Prevention and Control (IPPC) and Environmental Management of Industry

The two-year project (1998-00) aimed to help Latvia implement the IPPC directive, which involved establishing an environmental permitting system based on an integrated media approach; implementing Best Available Techniques (BAT) principles; promoting better environmental management in the industrial sector; and increasing public involvement in decision making. BAT principles (usually applied to new activities) prescribe adopting the best practicable available techniques for pollution control with environmental indicators—the degree of pollution prevention and control determine what constitutes "best." For example, when applied to emissions, BAT would prescribe adopting a technique to reduce emissions to the lowest achievable level, and licensing would require the producer to prove that the BAT is being used (a higher standard than merely achieving low emissions). The project helped carry out the following activities:

- Approximate the legal framework
- Establish regulations and administrative procedures for integrated permitting
- Develop strategies for Latvia's large industrial plants to apply BAT
- Develop environmental officials' capacity to issue and manage integrated permits
- Disseminate and increase awareness among the Latvian industrial community of EU requirements on IPPC

The result is that environmental authorities at national and regional levels increased their knowledge on permitting, BAT, and Cleaner Technologies (CT). Latvian environmental staff gained practical experience during environmental auditing of enterprises, study tours to Denmark, and in-country training courses. Good co-operation links were established between IPPC project consultants, the project group, and industrial enterprises. The project exemplifies effective technical assistance that could be replicated in other countries.

External consultants

Early stages of the accession process saw the most intensive use of external consultants. The Czech Republic used only external consultants prior to the first screening but responsibilities were gradually shifted to internal staff as they were trained and added—38 environment staff in 2000; 66 in 2001; and 231 in 2002. Despite these progressive staff increases, the total was less than requested.

Capacity changes

Respondents compared the human capacity to implement specific directives in 2000 and 2004; IPPC changed the most (Figure 2.1). In 2000, only 19 percent of respondents considered their institutional capacity adequate or better to implement IPPC; by 2004, this had increased to 45 percent.

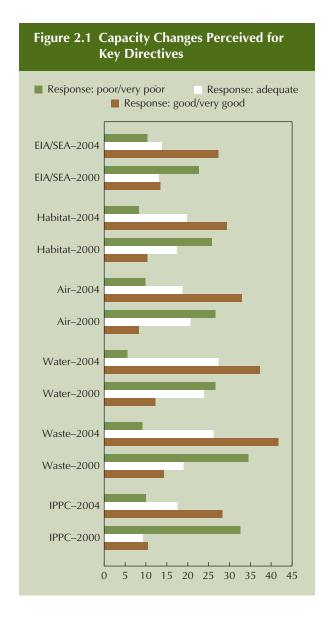
Environmental staff sizes vary in each country (Appendix J)

Staff size depends on country size, the profile and recognition of environmental issues, funding avail-

ability, and political commitment. Almost none of the planned staffing increases indicated in national strategies for EU approximation were carried out, due to insufficient funding. Study participants described how they had tried to "game" the process—they inflated estimates knowing that the Finance ministries would makes cuts to the proposals. In general, the rate of staff increases was highest during the pre-accession period, lower in the Baltics, and higher in Slovenia, Romania (as high as 50 percent), and Slovakia. Annual increases were not steady; most increases occurred in the two years prior to accession under political pressure of accession. Some countries underwent dramatic annual increases and struggled to train and absorb many new staff at once.

During pre-accession low salaries and heavy workloads led to staff attrition

The intensive transposition period created staff burnout and the transposition process and the focus on capacity building resulted in staff quickly acquiring marketable skills and expertise and leaving for the private sector. Focus groups and interviewees noted



the loss of experienced staff to private consulting firms. Staff reductions also occurred in response to more general restrictions of government employment. For example, in Hungary, overall staff reductions in all ministries led to lower environment staff numbers between 2002–04. In Romania, recruitment and procedures in the Civil Servants Employment Act constrained the ability to respond flexibly to the demands of the approximation process.

All countries experienced low capacity among local-level staff

Most training and capacity building occurred at the national level. Respondents noted that responsibilities increased at the local level without a corresponding increase in capacity or human resources. In Estonia and Hungary, respondents said cooperation with regional and local authorities could have been better and mentioned the need to assess local staff capacities. Hungarian focus group members highlighted the lack of inclusion of municipalities in training as "a huge capacity gap." In Lithuania, municipal staff noted they had insufficient time to attend all of the training.

Public Participation and Awareness

Include stakeholders in the planning process early on

Workshops, public consultations, stakeholder working groups and committees were the main means for including stakeholders. In most CEE countries, mechanisms for public feedback on draft legislation and on proposed projects have not been well-established. Some NGO representatives pointed out that when input is solicited late in the process or when access to information is limited, stakeholders' reactions are narrower, more reactive or even negative. Lack of the time for stakeholders to digest the problem may limit the usefulness of feedback mechanisms or create a mismatch between stakeholders' capacity to give feedback and the subject matter. For example in Slovenia, the Ministry of Environment and Spatial Planning involved NGOs in all working groups, but some NGO representatives were disappointed with the outcomes because they said the process was technical and the priorities were predetermined.

Stakeholder participation has improved but it tends to be ad hoc

Business community survey respondents complained during the transposition process that consultations were sporadic and their awareness of the requirements that would affect them was incomplete. Some 43 percent of business respondents said that the IPPC directive was most difficult, and one-third said the Water directive was difficult. Business interviewees said their input was sought on an ad hoc basis and there was little effort to explain the implications or advantages of accession. Business community respondents also highlighted the lack of uniformity in implementation across municipalities and the problems that this posed for them.

47

Mechanisms exist to increase public input and transparency

Although some NGOs found it more effective to bypass the national process and lobby directly at the EU level through international environmental umbrella organizations, some local level efforts have been successful in Bulgaria (Box 2.6).

Municipalities struggle to meet their public participation responsibilities

Decentralization and the new directives devolved responsibility for organizing public participation, in particular for EIA. In general, local respondents observed that municipalities did not add staff for the new responsibilities and requirements, hiring was restricted, and the time required for public consultations was underestimated. Municipal respondents said that local capacity building and training were needed. Estonian local authorities suggested that the central government could improve the flow of information to them by providing more advance notice, improving informal communications, and including local authorities in seminars. One county's local newspaper published environmental information of interest to the public.

NGOs can help with public participation

Respondents' opinions varied on the relationship between government and NGOs—not all subscribed to

the oppositional stereotype. Polish government respondents noted good cooperation with ecological NGOs, particularly at the local level. In the Czech Republic, government stakeholders said that "green" NGOs had unrealistic expectations about what could be accomplished in waste management. In Bulgaria, it was striking to note that government respondents did not identify Bulgarian civil society groups as key stakeholders for environment, despite their active participation during transposition. Some interviews and focus group discussions revealed concerns about "captive" NGOs—those that are too closely associated with a political party or government. Government respondents saw the absence of representative NGO networks as a problem. Government staff may not know with which NGOs to engage and as a result, tend to focus on those with whom they have established relationships. NGO representatives said that network organizations linking NGOs with common goals and interests facilitated engagement with ministries.

NGOs could assist with monitoring

Among NGOs, opinion varied on engagement with government. Many NGO respondents said that NGOs were capable of undertaking more functions, particularly those relating to monitoring, and expressed frustration that government did not see them as partners. Poland recognized NGO expertise and sought their participation with Natura 2000, but lack of funding for their participation in regional implementation teams reduced NGO involvement. One Lithuanian

Box 2.6

Public Participation and Local Government Implementation of Environment Acquis

Monitoring of Sofia Municipal Council (2004–05), Bulgaria

The Open Society Institute (OSI—Sofia) initiated and funded a project for Monitoring the Sofia Municipal Council (SMC) to enhance public accountability and protect public interest. Before the project, citizens were rarely included in the decision-making process on important issues of the Sofia municipality. The project focus areas included urban planning and architecture; finances and budget; environment and land use. An NGO Coalition formed a group of experts that included representatives from three environmental

NGOs to conduct the environment and land use monitoring. This group attended Municipal Council and its environmental commission meetings, observed and evaluated the Sofia Municipal Council decision-making processes and outputs, and prepared reports and checklists on the public process. The project raised public consciousness about environmental issues and contributed to more frequent open consultations with the wider public on matters concerning citizens and affecting the environment. The major outcome is that the current SMC is more transparent compared to the past.

Internet-Based Coordination and Information Sharing under the IPPC Directive

Best Available Techniques (BAT) Information Exchange System, Czech Republic

The Czech Best Available Techniques Information Exchange System (BAT-IES) has been developed based on Integrated Pollution Prevention and Control (IPPC) Directive requirements. BAT (Box 2.5) are a moving target due to continuous technology improvements so timely information exchange is crucial, and IT facilitates rapid sharing of technical information with stakeholders. The Czech BAT-IES facilitates information exchange among:

- Ministries of Trade and Industry, Environment, Agriculture, the Czech Environmental Information Agency, and the Czech Environmental Inspectorate
- Ministries and regional authorities
- Ministries and private industry stakeholders
- Civil society groups

An Internet-based tool is used (www.ippc.cz) to promote information coordination and exchange for IPPC and BAT. The most important output is an effective system for the Best Available Technique Reference Document (BREFs) translation. BREFs demonstrate best available techniques for each sector covered by IPPC and serve as reference guides for producers—e.g., glass manufacture, intensive livestock farming, textile processing or refineries. The website offers local language BREFs approximately one month after the EU websites publish the English version. The website promotes improved understanding among industry and regulators in key industrial sectors. The system helps MoE coordinate with other government bodies and facilitates intergovernment information sharing. The site facilitates discussions on implementation of BAT among regulated industry bodies and inspectors, which improves understanding of legal requirements and refines the interpretation of BAT-related Czech terminology.

NGO respondent noted that NGOs had insufficient capacity for professional dialogue with government, and recommended working to improve communication in a more constructive way.

Educational institutions

Academics were rarely involved in transposition and implementation of environmental legislation. Only 25 percent of survey respondents identified academics as stakeholders in the planning process, and interviewees from academic institutions said they received little information and were rarely consulted.

Data Management/Monitoring and Evaluation

Most respondents said that data management and monitoring improved over the accession period despite insufficient resources at the beginning to purchase equipment for environmental monitoring. A few respondents referred to the need for staff trained to carry out monitoring. Respondents said that the clear and strict legal requirements for accession improved their systems for environmental monitoring; others said im-

provements resulted from EU annual budgeting and reporting requirements. Some focus groups noted the EU approximation process had spread principles of greater monitoring transparency, but wondered if there was still scope for improvements.

Of the respondents who named data and information as a key issue, less than 10 percent said that data relating to the directives was easily and quickly accessible. Delays and difficulty obtaining data relating to transposition and implementation was generic across all Directives. Information technologies can facilitate information exchange and communication (Box 2.7).

Environmental Financing/ Resource Flows

The EU expectation is that countries will cover 90 percent of the costs of environmental investments for accession from their own sources.⁶⁸ In practice, the European Union, bilateral donors, and the IFIs provided CEE countries with the larger share of environ-

⁶⁸ The Environmental Challenge of EU Enlargement in CEE, Thematic report, 2001, Danish Environmental Protection Agency.

Dedicated Institution for Investment Coordination and EU Grant Financing

In May 2000, Estonia established the Environmental Investment Centre (EIC) based on the former Environmental Fund. The EIC is an effective and transparent tool for using funds directed to environmental investment projects and is an Implementing Agency for Structural and Cohesion Fund projects. Key drivers for establishing the EIC were a strong political will and a need for implementation arrangements for Structural and Cohesion Funds. The main lessons learned are that a small country needs only one implementing organization and building a new institution from an existing one meant that EIC inherited expertise in managing projects from the former environment fund, which had a track record on transparency and accountability that enabled the transformation and established trust.

"The law sets the composition of the council who has the right to make all decisions on project funding. All decisions and protocols are accessible on the Internet webpage. Everybody, including media, can make queries and then all the project documentation is made available."

Interview with Environmental Investment Centre, Estonia, December 2005

The EIC has shown to be helpful in overcoming some of the rigidities of budgetary spending. Such an institution could be established both for pre-accession and post-accession EU funds.

mental assistance—exact funding percentages were unavailable, but most respondents thought that infrastructure investment was the main focus of donor funding.

CEE countries established specialized environmental funds

Although respondents considered environmental funds effective for financing environment needs and for managing pre-accession funds, the effectiveness depends on using existing management systems and structures, otherwise the start-up costs are prohibitive (Box 2.8). Many of these funds were based on a system of pollution fees and penalties and operated at national and/or local level. The funds' institutional set-up and legal status varied considerably across the region. Some were largely independent, extra-budgetary legal entities with institutional infrastructures and others were essentially Ministry of Environment (MoE) budget lines administered by MoE staff. Some funds were created as nonprofit foundations (e.g., Polish "EcoFund"), some as government-owned joint stock companies (e.g., the Slovenian Environmental Development Fund), and others as special purpose "state institutions." The collection and redistribution of funds from fees and fines were implemented most effectively at the local level; however, these experiences have highlighted competing priorities between immediate micro-level needs and compliance with macro-level strategies (see Appendix I).

"Generally, the decision to incorporate the Environmental Protection Fund into the National budget facilitated the planning of operations, and size of program funding to be allocated."

Interview with Latvian Environmental Protection Fund Administration (LEPFA),
November 2005

Poland's system of environmental funds, established in 1989, has financed municipal infrastructure (wastewater treatment and solid waste management facilities). The National Fund for Environmental Protection and Water Management and the related voivodship (regional), powiat (county) and gmina (municipal) environmental funds supply an estimated 40 percent of the financing for environmental protection in Poland.⁶⁹ Other CEE countries' environmental funds

⁶⁹ The Environmental Challenge of EU Enlargement in CEE, Thematic report, 2001, Danish Environmental Protection Agency.

International/Sub-Regional Cooperation for Capacity Building for the Environment Acquis

Baltic Environmental Forum (BEF), Estonia, Latvia, and Lithuania

In 1995, the Baltic Ministries of Environment, Germany, and the EC established the BEF as a special multilateral technical assistance project to strengthen co-operation and capacity among the Baltic environmental authorities. BEF supported extensive training and consultation among environmental officials and specialists in the Baltic region (Estonia, Latvia, Lithuania). Financing was based on long-term commitments from beneficiaries, EC, and donors with a 2–3 year programming period that enabled topic development well in advance. The coordinated multi-donor funding enabled more substantial and

comprehensive programs that were tailored to beneficiaries' own needs assessment. The program was coordinated from the Secretariat of the Baltic States Environmental Ministers Council, which provided a high level political platform for sub-regional cooperation.

Key outputs include a strong network of environmental authorities in the Baltic States and capacity improvements for local teams that developed into EU-proficient environmental experts. Legislation before accession period was similar in Baltic States, which facilitated exchange of common approaches and experiences with transposition and implementation.

have been unable to repeat Poland's success in generating large amounts of domestic capital, but these funds have facilitated environmental investments (project preparation and management of donor-financed projects).

Respondents considered expenditures from environmental funds crucial to leverage additional resources. Environmental funds managed EU financial assistance as it became available to support environmental investments in some CEE countries. Funds in Estonia, Poland, Lithuania, and Slovenia have successfully administered post-accession financial assistance from the EU for environmental protection. The funds were effectively involved with the EU funds either directly as implementing agencies or indirectly as co-financing units.

National level funding was considered most effective, and focus group participants commented that multi-year funding from multiple sources supported project planning and delivery (despite the complexity of managing multiple sources). Participants highlighted two areas of concern with respect to funding: inflexible budget lines at times of crises or emergency response and the burden of annual planning and reporting. In addition, respondents linked the utilization of available national funds to other constraints—the limited pool of implementing partners or approved contractors; and low-value contracts were unattractive to other contractors who could potentially provide greater value.

Fund management skills were also useful after accession

Focus group participants recommended greater attention to fund management noting that the experience and knowledge gathered by these units would also be useful after accession for structural and cohesion funds management units. In Poland, the State Environmental Fund took over the responsibility for management of EU funds after accession. However, state and local governments reported difficulties using EU funds due to co-financing requirements.

International Cooperation

Respondents strongly encouraged participation in EC committees and groups, which offered opportunities for informal information sharing with international colleagues to understand the requirements of Directives and how to implement them. Municipal respondents from Slovakia reported that international cooperation with Hungary, Austria, and the Czech Republic on the Water Basins Directive was effective. City representatives from several countries stressed the need to include municipalities in international networks, particularly for comparing progress; the "Eurocities" and the "City Toward EU Compliance Award" program were cited as useful with respect to environmental issues (Box 2.9). Focus groups emphasized the necessity of fora in which to address regional issues.

3

Key Recommendations and Conclusions

Strengthening institutions will require each country to devote a larger share of the national budget to the environment, to reform intra-governmental institutions, and enhance administrative capacity.



entral and Eastern Europe countries' reform process struggled through trial and error and they learned by doing. Their experiences are not templates to be copied but more of a roadmap for the West Balkan countries to follow and adapt to their own country circumstances. This chapter summarizes key messages and recommendations.

Strengthen institutions

This is the priority of the environment agenda for all West Balkan countries if they are to progress with EU integration. Strengthening institutions will require each country to devote a larger share of the national budget to the environment, to reform intra-governmental institutions, and enhance administrative capacity. The integration process that began with the SAA has been sustained with support from the EU and other donors. West Balkan countries have achieved significant progress on environment planning strategies and harmonizing legal frameworks with the Acquis; they have taken the first steps to strengthen public administration capacity for the environment. Most environment professionals across the region now have a much broader understanding of the challenges and opportunities offered by the Acquis, are familiar with the basic EU environment terminology, and have begun implementation of Acquis harmonized programs in certain areas. The path and timetable of each country will vary depending on initial circumstances, the readiness of governments to adapt to new Acquis implementation functions, and the choices made in the integration process.

Address the growing gap

The gap is widening between adoption of new environmental legislation on paper and the institutional capacity to implement the new laws. This situation needs to be addressed systematically. Country stakeholders need to take stock and prioritize by addressing the following key questions.

■ How should we organize ourselves for the tasks ahead? Are our institutions and structures adequately prepared, and what do we need to do to be prepared?

- Do we understand the benefits of harmonization with the Acquis and how will we engage and communicate with local stakeholders to ensure its implementation is locally relevant? Can we do this alone and if not, where can we get the most relevant support?
- Are our budget priorities aligned with our future EU integration objectives?
- How do we prioritize between reforms and investments needed now versus costly and heavier investments potentially eligible for transition periods later?
- How do we sequence actions to minimize costs and maximize the absorption of EU funds (including pre-accession funds available)?

Overview

The following general reform recommendations stemming from CEE experience apply broadly to all countries, or any country with a longer-term objective of harmonizing with the EU environment Acquis (Table 3.1). Some country-specific recommendations follow later in the chapter.

Lessons for development partners

Although this study did not specifically review donor performance in the West Balkans, the following approaches may be useful for donors and financiers, including the World Bank, to apply to their own programs.

- Strategy. Ensure that all investment/project interventions contribute to the national capacity-building strategy—if there is no strategy, help fund its preparation.
- Country ownership. Require strong country ownership and local participation in donor-financed investments and capacity-building projects. Maintain flexibility on financing new staff positions on a declining basis until budget cycles catch up with needed staffing.
- Data collection. Identify data needs up front and include increased data transparency as a project monitoring indicator or goal.
- Coordination. Develop and support coordination mechanisms as integral components of projects or investments that involve multiple government Ministries or agencies. Long-term coordination is essential unless there is major government restructuring.
- Vertical integration. Ensure upward (Ministry of Finance) and downward (municipal/local level) coordination within future municipal environment investment projects.
- Local level. Develop investments and projects that integrate local-level needs in National Policy and Planning.

Table 3.1 Summary of Recommended Reform Objectives

Form and Functions of Government

- Create a clear separation between policy and regulatory functions—evaluate the future of EPAs.
- Reduce fragmentation by evaluating Ministry functions to capture synergies and reduce duplication.
- Decentralize or deconcentrate regulatory functions to the lowest competent body with capacity (potential for phasing in functions over time).
- Designate a lead department or institution for key environment directives to create clear coordination and reporting lines across institutions.
- Consolidate inspection bodies across media to support a shift to integrated permitting requirements; and ensure close cooperation with permitting (regulatory) bodies.

Public Administration, Human Resources, Governance

- Strengthen mechanisms to coordinate across government (i.e., Inter-Ministerial committees; websites, specific Directive working groups; commissions or councils for monitoring higher-level strategies and action plans).
- Promote functional cooperation and integration among environmental units in key non-environment Ministries.
- Increase staffing to administer passed legislation and plan staff increases to support future accession requirements.

Table 3.1 Summary of Recommended Reform Objectives (Continued)

- Prepare a human resources development strategy that integrates staffing, training, and retention policies—including at the local level.
- Ensure that technical knowledge is institutionalized and de-politicized. Promote local private sector environmental services to support government in implementation of environmental laws, especially EIA, IPPC, SEA, and waste management.
- Consolidate data across institutions and government levels to enhance heavy information collection and reporting requirements and promote data sharing among staff and institutions.
- Systemize monitoring and evaluation of government programs across institutions; strengthen link between budgets
 and program implementation. Seek external monitoring and evaluation assistance to supplement limited
 government capacity.

Public Participation/Awareness

- Evaluate local administration skills to implement public participation and public awareness requirements and remedy any gaps with training.
- Allocate sufficient budget and time for public participation requirements of the Acquis.
- Broaden use of the Internet as a tool for public awareness and consultation (draft legislation, policy measures, investments needed).

Legal Harmonization and Planning (Transposition Strategies)

- Create realistic transposition timetables—allow time for government to develop administrative systems to implement legislation.
- Create space in transposition timetable to allow stakeholder consultation and preparation.
- Clarify critical aspects of Directives—which legislation applies to which stakeholders—by updating existing legislation rather than waiting until transposition of the Directive is completed.
- · Prioritize completion of strategy work, framework laws, and EIA. Expect multiple revisions of framework laws.
- Double check translation to ensure that terminology conveys the intended meaning in local contexts.
- Ensure that overlapping institutional responsibilities are clarified in laws and establish coordination mechanisms during the transposition process.
- Classify and prioritize legislation to be harmonized—first, trade and participation in EU markets, second, transboundary cooperation, and third, future heavy investments.

Financing

- Environment funds are most useful when focused and time-bound because a fund requires substantial capacity building, which has high opportunity costs, especially in countries where environment capacity is already weak, as is the case with most of the West Balkans.
- Align budget priorities with future EU integration objectives. Increase national budget share for environment investments and seek to diversify financing sources.
- Establish government-driven programs for investment planning, program management skill development, and promote early work on developing project pipelines.
- Increase capacities where they are weakest by focusing training at the municipal level.
- Prioritize and sequence investments based on affordability and sustainability of their operations and maintenance.
- De-politicize funding-related decisions by ensuring that all stakeholders' views are represented.

International Cooperation

- Increase sub-regional and international cooperation while maximizing support from the nearest EU neighbors.
- Strengthen successful ongoing networks of environment professionals by supplementing donor funds with state budget contributions.
- Integrate development partner expertise with country efforts to develop long-term working contacts. Use international assistance for pilot projects and train-the-trainer-programs.
- Maintain strong local involvement in projects to adapt international expertise to local conditions.
- Diversify transboundary cooperation (upgrade border control systems for waste, chemicals, sources of ionizing emissions, protected plants and animals, student exchange, and training).

- **Sector-wide approaches.** Coordinate efforts with other donors while upgrading country capacity to lead these efforts. All investments should fit within the wider government investment program.
- **Networking.** Include funds to promote intracountry and regional learning exchange in pilot investments.
- Policy reform support. Innovate with all available support tools to help promote government-wide reforms that strengthen alignment to the Acquis. This could include World Bank development policy lending and investments (Box 3.1). Other innovative instruments such as "horizontal" lending—lending to individual countries under a multicountry framework agreement—can promote common regional goals.
- Reinforce and integrate environment. Seek to reinforce and integrate environment reforms across all development/donor programs—not just environment programs. The cross-cutting demands of the environment Acquis means that all parts of government will bear the costs and reap the benefits of achieving environment goals. Environment reforms reinforce good governance across sectors and provide an entry point to support "double dividend" returns.

The following thematic sections include recommendations that apply to all West Balkan countries, with some country-specific advice tailored to progress with EU integration.

Transposition Strategies

Transposition in the West Balkans should emphasize implementation

Transposition sequencing strategies should be driven by key stakeholders' preparation time and the time needed to develop administrative systems to implement legislation. Governments in each country will need to close the widening gap between new laws adopted on paper and their implementation, which will require increased funding for administration, developing secondary legislation, and undertaking institutional reforms.

Transposition timetables should match capacity to implement

This will imply delays in full transposition for some Directives until the government can increase funding and training to strengthen capacity. Transposition should include a critical review of existing environmental laws' implementation and enforcement. For example, all countries need to pay more attention to basic environmental enforcement if they are to build and sustain government credibility, particularly as government introduces complex directives regulating industries. Governments should continue to use the ECENA network to advance enforcement improvements, and elevate environmental enforcement needs in each country's accession efforts.

 Bosnia and Herzegovina currently faces the most acute gap between legal requirements and enforcement actions.

Box 3.1

World Bank Development Policy Lending to Promote Environment Reforms

World Bank program innovations in Latin America include using several development policy loans to promote government-wide environment institutional reforms across Brazil, Colombia, and Mexico. The loans typically include thematic pillars such as energy, forestry, water, tourism, etc. and identify inter-government reform actions that previously were difficult for a single Ministry to achieve. The government and the World Bank used development policy lending programs and the more influential Ministry of Finance to convene stakeholders and elevate national dialogue on cross-cutting environment reforms. In Mexico, inter-Ministerial committees led by high-

level State Secretaries were asked to resolve the competing environmental demands of tourism, nature protection, and fisheries, which resulted in new financing mechanisms for marine-protected areas. Some Ministries that had never before collaborated realized they had common objectives and synergies. Development policy lending for environment reform has been used less in the Europe and Central Asia Region, whereas in Bulgaria development policy and investment lending were combined to promote reforms to address legacy pollution in privatization. (revisit Box 1.2)

Multiple iterations of framework legislation are inevitable

The framework establishes the course and direction of future environment laws and transposition. At the time of writing, the following conditions existed.

- Serbia has pending draft laws to be completed to demonstrate progress toward SAA.
- **Macedonia** proposed updates to its framework law.
- **Montenegro** as a newly independent state also has plans to update framework laws.
- Albania is updating framework laws to advance its SAA program.

Environmental Impact Assessment is a key cross-cutting environmental directive

The capacity for EIA is crucial for sustainability and access to pre-accession funds, which means that countries should prioritize implementation—administrative procedures, regulations, and by-laws. Implementation will also require increased funding to hire additional staff, to conduct staff training, and to carry out institutional reforms—three actions necessary to elevate the importance and visibility of EIA.⁷⁰

- Bosnia and Herzegovina, Montenegro, Albania currently face the greatest challenges on EIA implementation and capacity. The process of testing new institutional arrangements should be integrated directly with future transposition efforts.
- Serbia lacks secondary legislation for updated EIA and SEA laws and should place priority on strengthening practical implementation.
- Macedonia has completed most of its EIA legislation and now needs to strengthen practical implementation.

Comprehensive environment development strategies are building blocks for accession

The process of developing a strategy is sometimes a country's first experience with broad-based consensus building on environment. These strategies con-

⁷⁰ In CEE countries that succeeded in strengthening EIA carried out institutional reforms to strengthen capacity, which included creating independent EIA centers and elevating EIA-responsible departments to the highest positions within the Ministry.

tribute to defining future priorities for transposition. Most West Balkan countries have completed this process.

- Serbia is preparing a National Environmental Action Plan (NEAP).
- Montenegro has drafted a Strategy for Sustainable Development, which should be completed as a high priority.

Update-as-you-go

Critical aspects of Directives should be harmonized first through updates to existing legislation or other government decisions, rather than waiting for complete transposition. Acquis harmonization efforts can be prioritized on the following basis: (a) links with trade and participation in EU markets, (b) transboundary cooperation, and (c) future heavy investments. Specific external stakeholders need to anticipate future requirements and therefore should be involved early on in drafting detailed proposals for new laws. For example, within the complex IPPC Directive, countries should first tackle the articulation of Annex 1 Industries.⁷¹

Institutional Reforms

Environment institutions are fragmented in the West Balkans

Intra-government restructuring should be expected and tackled early—allocate roles and responsibilities, designate a lead institution, and assign a contact for each directive. Government structures should be revisited early to optimize for the Acquis based on functional needs and carefully tested to try to avoid reversals. Some countries reported that the most common reforms were consolidating water and environment, and establishing an EPA and/or specialized institutions for EIA, waste, IPPC, and investment financing. Inspection bodies earlier fragmented were consolidated across media (water, air, waste, nature protection) in most cases to support a shift to integrated permitting.

 $^{^{71}}$ Those industries for which the Directive will be applied in the respective country.

Create clear separations among functions, institutions, and levels of government

In the West Balkans, policy and regulatory-based functions are typically mixed within institutions, across institutions and at various levels of government. Environmental and decentralization reforms should be coordinated and integrated to avoid problems and delays. Strategies to create clear separations should take the following into account: decentralization plans (regulatory functions are easier to decentralize), current capacity to absorb the function (phasing may be required), consolidating institutional reporting of environment data for EU reporting, and central policy work.

■ Albania, Macedonia, and Kosovo (the most decentralized) should assess current local-level regulatory responsibilities and develop a capacity-building plan, which may involve new institutional arrangements.

All countries should evaluate the future of EPAs

Each country needs a long-term vision of the breadth of regulatory functions that agencies will carry. Typically, European countries have had central EPAs (to lead environmental regulation) and local or regional EPAs (to decentralize regulation). This arrangement separates policy and regulation and creates complementary national and local functions. Some EPAs limit their regulatory functions to monitoring and reporting. West Balkan states should consider adopting EPA functions in phases because the institutions are new, and during pre-accession reforms they will likely inherit functions from other institutions.

- **Serbia** and **Kosovo** have recently established EPAs.
- **Montenegro** has plans to establish an EPA under its economic reform agenda.
- Albania and Macedonia have proposed creating an EPA from existing institutions.

Prepare for Acquis responsibilities that require integration

The Acquis requires water and other media to be integrated for permitting. Reporting to the EU on water

is integrated with reporting on all other environment issues. In most West Balkan countries except for Albania, responsibility for water is shared across ministries. However, extensive EU grant financing for water (i.e., IPA and Structural and Cohesion Funds) means that countries should gradually consolidate their work on water issues.⁷²

Each country must evaluate institutional arrangements in its own context

- Montenegro should align administrative supervision of the National Nature Protection Institute (currently under Ministry of Culture and Media) with Ministerial-level responsibilities for Nature Protection (Environment), which typifies EU institutional arrangements.
- Albania might reconsider having a single Ministry that includes forestry, fisheries, water protection, and environment. The heavy demands of EU integration makes this arrangement cumbersome in the medium-to long-term. In fact, aggregation is rare among EU states.
- Bosnia and Herzegovina's mixed government structures present unique challenges. The state level lacks environment administrative arrangements, which is problematic because the Acquis demands heavy centralized coordination and reporting. Thus, BiH will likely be required to establish a state-level Ministry of Environment and EPA. BiH is also the only country in which the inspection body is not designated "environment" and reports to a non-environment institution. As a first step, BiH might consider consolidating several existing inspectorate services⁷³ into one environment inspectorate. In subsequent steps, the country could undertake systemic reforms to link the inspectorate more closely

⁷² Large EU grant funds for water infrastructure investments, with the exception of rural water infrastructure which is supported through Rural Development (Agriculture) programs, are most typically "administered" through the lead Environment Ministry.

⁷³ Bosnia and Herzegovina has one inspectorate administration per Entity with 10 inspection services: 1) tourism and market; 2) sanitary; 3) labor; 4) construction; 5) communication; 6) agriculture; 7) forestry; 8) water; 9) veterinary; 10) technical. Environment is not a separate unit—however it needs to exist separately and should aggregate water, some parts of sanitation; protective aspects of forests; and possibly some items currently combined with construction. It should also cover air quality and solid waste.

to entities that grant permits and regulate because these currently are fragmented across government. The goal would be for institutions to share common data and monitoring information.

Coordination Mechanisms and Intra-Government Communication

All countries need to strengthen communication and coordination

Administering the Acquis will require extensive intersectoral and intra-governmental coordination, and communication between the prime environment ministries and other government agencies that is well beyond current practice in any West Balkan state. Environment ministries need to develop mechanisms early and strengthen them throughout pre-accession to become a stronger intra-government coordinator, communicator, and vehicle for information sharing and exchange. A mixture of formal mechanisms such as Inter-Ministerial Committees and specific Directive-related Working Groups, and informal coordination for certain tasks is effective.

All countries should assess existing coordination mechanisms

Under the Acquis, coordination will be essential to exchange and share information, to integrate environmental issues into government decisions and all sector strategies, and to enforce environment recommendations. High-level commissions or councils can be effective for follow-up and monitoring of higher-level strategies and action plans. Current coordination in the West Balkans is far from ideal—some standing and ad-hoc Inter-Ministerial working groups and coordination mechanisms are weak and ineffective. Coordination mechanisms function most effectively when they are accountable for decisions, when they balance technical and management expertise, use simple procedures, and offer incentives for collaboration.

Establish environmental coordination units in key non-environment Ministries

These units can also facilitate environment information and data sharing.

- **Kosovo's** Ministry of Energy and Mining has an environment department that exemplifies this practice.
- **Serbia** should strengthen inter-sectoral cooperation related to mining and natural resources exploration, water management, electricity generation, and forestry, and agriculture.
- For coordinating environment administrative functions. The current government structures requires strong coordination mechanisms to cope with even basic tasks, therefore adopting coordination mechanisms should be coupled with overall public administration reforms. The Bosnian government has undertaken a detailed functional review of the environment sector, which recommended strategies to strengthen intra-government coordination. The Bosnian government could undertake a comprehensive program of institution strengthening and reform based on the recommendations of the review.

Enhance Ministry of Environment websites

The Internet became a tool for sharing information across government agencies because there were no integrated government-wide IT systems. Governments should establish websites specifically for inter-agency work that link to common datasets and key documents. Explicit government requirements or mandates to share data openly across agencies might be required to overturn prevailing "confidentiality" practices, which are problematic even among units within the same Ministry. IT expertise is needed in Environment Ministries to maximize the use of this important tool.

Albania, Bosnia and Herzegovina, Montenegro, Serbia, and Kosovo should focus on improving websites.

Human Capacity and Resources

The accession process can create a net gain in human resources capacity

Some post-accession countries reported significant gains in human capacity but the news was not all good. Overall staffing levels were too low to begin with and concurrent public administrative reforms that emphasized reductions or capping staff numbers exacerbated

shortages. Explicit pressure from the EU increased staff levels most significantly and dramatically in the two years prior to accession, but this left too little time to train staff to operate effectively in their new functions. Also, heavy workloads led to staff burnout and attrition to the private sector, and insufficient efforts to build capacity at the local level constrained their ability to absorb EU funds.

West Balkan countries will need to increase environment staff

In the short term, countries will have to increase staffing levels to administer already-passed legislation, and substantial further increases will be needed to fully meet accession requirements. Most environment institutions lack sufficient staff to adequately perform *existing* functions.

- Albania's most immediate needs are environment inspection, and the draft national environment strategy estimates staff will need to be tripled by 2015.
- Macedonia's 2005 environment functional review estimates a deficiency of 35 staff after contract positions are accounted for, and in the near term, an additional 123 staff to perform new accession-related functions.
- Montenegro lacks sufficient staff to implement existing environment laws but public administration reforms in the early years of becoming an independent state offer potential to accommodate the needs of the environment in an EU context.
- **Serbia's** staffing is well below most European states of comparable size.
- **Kosovo's** immediate staff needs are at the environment inspectorate, which is facing potential across-the-board staff cuts in 2008, undermining efforts to build a strong cadre of national professionals.
- Bosnia and Herzegovina's functional review notes systemic understaffing of government-approved environment positions "to the point where legal obligations become meaningless." Environment function effectiveness is undercut by low staff numbers and exacerbated by fragmented government structures and failure to collaborate on environment tasks. An overall increase of 59 staff is recommended in the near term.

Human resource estimates are incomplete or require follow-up action

Government-wide functional reviews or capacity assessments are recommended for **Kosovo**, **Serbia**, and **Montenegro**. Follow-up on recent reviews is required in **Macedonia**, **Albania**, and **Bosnia** and **Herzegovina** to ensure that Finance Ministries fully understand environment sector staffing needs and their implications for the Acquis vis-à-vis other sectors. More details on the existing administration costs could refine the correlation of staff overheads with functional outputs.

All countries need to prepare a human resources capacity development strategy

Each country strategy should integrate environment staffing, training, and retention policies, including local-level staffing. Training programs should address skill gaps in foreign languages (especially English), planning and project management, negotiations, public consultations, investment resources, and EU policies and procedures. Ideally training program participants should include regional and local administration staff and influential stakeholders such as academics, and training should focus on public servants rather than political appointees. All donor funds should be integrated, pooled and used to advance the human resources capacity development strategy.

Montenegro, Bosnia and Herzegovina and Kosovo, which are donor-dependent administrations, need to ensure more involvement of local staff in projects to strengthen ownership and build sustainable local capacity.

Public Participation and Awareness

Additional earmarked budget is needed for Acquis public participation requirements

All countries need to strengthen public participation. The EU requirements for public participation will demand significant additional staff time and new tools to share information and raise public awareness. However, the benefits are stronger public acceptance of decisions and strategies, greater transparency of information and decision-making, and increased trust between government and stakeholders. Many accession countries found that detaching public awareness and

participation from other environment functions helped to strengthen it and ensure adequate resources (e.g., EIA centers and EPAs). Local-level administrations faced the largest gap between their capacity to implement participation requirements and the funding provided.

Increase use of the Internet for public awareness and consultation

As connectivity rates grow across the region, during the early phases of the accession process, the public can access government websites and comment on draft legislation, policy, and investments. The government can post responses to comments to enhance transparency and public participation.

Environment institutions should undertake early outreach to stakeholders

Governments are obligated to provide advance information to stakeholders that need to invest in compliance measures for the Acquis (e.g., owners of large farming operations, industries) so these entities can meet requirements in time for accession. Therefore, governments should decide early who will need to comply—there is no need to wait for full transposition. Outreach should target large audience segments through industry and trade groups, chambers of commerce, NGO networks or umbrella organizations, academia, and so forth to avoid accusations of informing only special interest groups. Educational programs for children should also be funded, as youth are agents for change and future stakeholders.

Data Management/Monitoring and Evaluation

Improve data management, monitoring and evaluation

Standardized data monitoring and reporting improves ability to track progress among EU member states and contributes to equitable EU law enforcement. Data reporting for the Acquis involves consolidating (and recentralizing) data collected across institutions and levels of government. Strict Acquis reporting requirements have helped countries boost their capacity to collect and monitor environment data as they prepared for centralized reporting to the EU EIONET network.

Invest early in data management tools

Data management tools will ease compliance with the substantial information collection and reporting requirements and promote data sharing among staffs and institutions. The new and recently proposed environment agencies in Serbia, Kosovo, Montenegro, and Albania should develop environment information systems and websites to comply with EU EIONET network requirements. Government statistical departments should cooperate with environment bodies that collect data with the objective of harmonizing environmental data with EUROSTAT reporting. If the Ministry of Environment established performancebased budgets that link expenditure to monitoring and evaluation of program indicators, environmental institutions could quantify the large demands placed on them by the Acquis. Investments are needed to expand and update air, water, and soil sampling and monitoring procedures; develop laboratory testing capacity; and integrate and connect databases among agencies through expanded computer systems and networks.

Systematize monitoring and evaluation of government programs across institutions

Monitoring and evaluation capacity will be important to take advantage of EU-funded programs and ultimately supports better internal management decisions. Donor and EU-funded programs are "learning-bydoing" opportunities to boost capacity. External parties including NGOs and the wider public should participate in monitoring and evaluation programs to supplement limited government capacity and increase transparency and credibility.

Environment Investment Financing/ Resource Flows

The environment Acquis requires substantial increases in public funding

Adopting the Acquis will require increased public funds dedicated to environmental management and protection. Many accession countries developed environment funds comprised of fees, fines, and charges. However, these funds covered only a small part of investment needs and all countries supplemented the fund by increasing the share of funds from their own budget. Later, some countries successfully transformed environment funds into implementation bodies for

EU grants. Other environment funds were phased out or refocused on specialized financing niches. Successful funds invested more heavily in improving governance and were rated highly for accountability and transparency of operations.

Environment funds are not a substitute for additional state budget resources

Environment funds are not a panacea for environment investments. Governments need to evaluate the effectiveness of existing budget mechanisms for channeling resources to environment investments and the near-term prospects for improvement. Factors to be considered are: (a) absorption capacity; (b) availability of a minimal level of resource inflows to justify a separate mechanism; (c) availability of financing for institutional capacity to operate; and (d) trade-offs against capacity gaps in government left unfunded. A long-term strategy is needed on the role a new fund would take related to EU grant funds administration so that critical institutional, governance, and capacity building investments will then focus on the most relevant goals. Recently established environment funds in BiH and Kosovo and recent proposals to establish them in Albania and Montenegro should be considered carefully within each context.

Develop investment planning and prioritization skills

Beneficiary countries need to prepare to use and absorb EU grants from the IPA program when investment windows are opened. Early work is required to reap benefits because it takes several years to develop project pipelines. Some donor-funded training programs have been aimed at pipeline development support; however, more significant efforts will be required, especially related to heavy investment Directives. These efforts should be guided by government-driven programs (not only donor priorities). Training should focus on the municipal level—the nexus of heaviest investment needs and weakest capacity. Investments should be prioritized and sequenced according to affordability and sustainability of operations and maintenance costs. Overall costs can be lowered if the most cost-effective investments are first and if programs create incentives to design innovative low-cost solutions.

International Cooperation

Increase engagement in sub-regional and international cooperation

There is a wider scope for the West Balkans to seek support from their nearest EU neighbors to achieve harmonization. In many countries, networks established among their neighbors during pre-accession facilitated real-time lessons learned and discussions of draft legislation. The Baltic Environment Forum was a successful sub-regional cooperation mechanism that West Balkan countries could replicate. Successful ongoing networks of environment professionals (such as ECENA) should be maintained and strengthened with government funding. Cooperation among the region's Environment Ministers can be strengthened by holding more regular meetings—perhaps semi-annual ministerial forums.

West Balkan countries should continue to integrate international partners' expertise

International cooperation provides opportunities to develop long-term working relationships with outside environment professionals. Countries should adapt international expertise to local conditions, which requires a strong partnership and local involvement in all programs. Direct EU grant contracted programs can sometimes be more useful than "twinning" or staff exchange arrangements because twinning partners' experience is often limited to their own country and lacks a broad perspective. However, careful selection of twinning partners and strategic use of their expertise could make twinning more effective.

Transboundary cooperation contributes to common support on local challenges

It should be used to advance work on key transboundary issues and develop working relations so agreements can be reached for Cooperation with EU member states to help mobilize additional resources (e.g., INTERREG funds)⁷⁴ to common challenges. More work can be done in the West Balkans to cooperate on upgrading border control systems for waste,

 $^{^{74}}$ INTERREG is an EU Grant program available to EU members for projects in cooperation with their neighbors.

chemicals, and sources of ionizing emissions, protected plant and animals.

Bosnia and Herzegovina and Albania lack postgraduate environment programs and therefore should facilitate student exchange and training in neighboring countries, which will initiate future professional cooperation.

International experience should be used for pilot projects

Technology transfer and know-how happens at this stage and countries can then scale up successful prac-

tices. International and regional experts could be used for capacity building for train-the-trainer programs and training of local staff, in addition to training for central government staff. Regional initiatives such as PEIP, which was developed within the framework of the REReP, represent a good exchange of regional experiences and advancing towards implementing international standards. The PEIP objective was to assist national and local governments in planning environmental investments, preparing environmental investment projects, and finding financing for project implementation. Future efforts will require greater alignment of priorities with Ministry of Finance expenditure programs.



EU Environmental Legislation

1. List of Environmental Legislation Covered by Progress Monitoring⁷⁵

Horizontal

EIA (85/337/EEC) as amended by Directives 97/11/EC and 2003/35/EC Environmental Information (2003/4/EC) SEA (2001/42/EC)

Public Participation (2003/35/EC) Environmental liability (2004/35/EC)

Air Quality

Ambient Air Quality Framework (96/62/EC) as amended by Regulation EC/1882/2003

VOCs from Petrol Stations (94/63/EC) as amended by Regulation EC/1882/2003

Limit Values for SO2, NOx, Lead (99/30/EC) as amended by Decision 2001/744/EC

Sulphur content liquid fuels (93/12/EEC) as amended by Directive 99/32/EC and Regulation EC/1882/2003

Limit Values for Benzene and Carbon Monoxide in Ambient Air (2000/69/EC)

Availability of Consumer information on Fuel economy and CO2 Emission in Marketing of New Passenger Cars (1999/94/EC) as amended by Directive 2003/73/EC

National Emission Ceilings for Certain Atmospheric Pollutants (2001/81/EC)

Ozone in Ambient Air (2002/3/EC)

Quality of Petrol & Diesel Fuels (98/70/EC) as amended by Directives 2000/71/EC, 2003/17/EC and Regulation EC/1882/2003

Emission Trading Directive (2003/87/EC)

Waste Management

Waste Framework (75/442/EEC) as amended by Directives 91/156/EEC, 91/692/EEC and Regulation EC/1882/2003/EC as well as by Decision 96/350/EC

Hazardous Waste (91/689/EEC) as amended by Directive 94/31/EC

Packaging Waste (94/62/EC) as amended by Directive 2003/1882/EC and Directive 2004/12/EC

Sewage Sludge (86/278/EEC) as amended by Directives 91/692/EEC and Regulation EC/807/2003

Disposal of Waste Oils (75/439/EEC) as amended by Directives 87/101/EEC, 91/692/EEC and 2000/76/EC

Disposal of PCBs & PCTs (96/59/EC)

Batteries (91/157/EEC) as amended by Directive 98/101/EC

Labeling of Batteries (93/86/EC)

Landfill of Waste (99/31/EC) as amended by Regulation EC/1882/2003

Incineration of Waste (2000/76/EC)

End-of-Life Vehicles (2000/53/EC) as amended by Decision 2002/525/EC

RoHS (2002/95/EC)

WEEE (2002/96/EC) as amended by Directive 2003/108/EC

Waste Shipment Regulation (EEC/259/93) as amended by Decisions 94/721, 96/660, Regulation 120/97, Decision 368/98, Regulation 2408/98, Decision 99/816 and Regulation 2557/2001

(Continued)

⁷⁵ DG Environment Progress Monitoring Manual 2004: http://europa.eu.int/comm/environment/enlarg/pdf/pm3_manual.pdf

Water Quality

Urban Waste Water (91/271/EEC) as amended by Directive 98/15/EC and Regulation EC/1882/2003

Drinking Water (98/83/EC) as amended by Regulation EC/1882/2003

Nitrates Directive (91/676/EEC) as amended by Regulation EC/1882/2003

Bathing Water Directive (76/160/EEC) as amended by Directive 91/692/EEC and Regulation EC/807/2003

Measurement of Drinking Water (79/869/EEC) as amended by Directives 81/855/EEC, 91/692/EEC, Regulation EC/807/2003

Groundwater (80/68/EEC) as amended by Directive 91/692/EEC

Dangerous Substances to Water (76/464/EEC) as amended by Directive 91/692/EEC and 2000/60/EC

List One Substances (86/280/EEC) as amended by Directives 88/347/EEC, 90/415/EEC and 91/692/EEC

- Mercury from Chlor-Alkali Industries (82/176/EEC) as amended by Directive 91/692/EEC
- Other Mercury Discharges (84/156/EEC) as amended by Directive 91/692/EEC
- Cadmium Discharges (83/513/EEC) as amended by Directive 91/692/EEC
- HCH Discharges (84/491/EEC) as amended by Directive 91/692/EEC

Surface Water for Abstraction (75/440/EEC) as amended by Directives 79/869/EEC and 91/692/EEC

Shellfish Water (79/923/EEC) as amended by Directive 91/692/EEC

Fish Water (78/659/EEC) as amended by Directive 91/692/EEC and Regulation EC/807/2003

Water Policy Framework (2000/60/EC) as amended by Decision 2455/2001/EC

Nature Protection

Habitats (92/43/EEC) as amended by Directive 97/62/EC and Regulation EC/1882/2003

Wild Birds (79/409/EEC) as amended by Directives 81/854/EEC, 85/411/EEC, 86/122/EEC, 91/244/EEC, 94/24/EC 97/49/EC and Regulation EC/807/2003

Wild Animals in Zoos (1999/22/EC)

Endangered Species (EC/338/97) as amended by Regulations 938/97, 2307/97, 2214/98, 1476/99, 2724/2000, 1579/2001, 2476/2001, 1497/2003, 1882/2003 and 834/2004; including implementing Regulations EC/1808/2002 and EC/349/2003, amended by Regulation 776/2004

Leghold Traps (EEC/3254/91)

Industrial Pollution Control

IPPC (96/61/EC) as amended by Directives 2003/35/EC, 2003/87/EC and Regulation EC/1882/2003

COMAH (96/82/EC) as amended by Directive 2003/105/EC and Regulation EC/1882/2003

Solvents (1999/13/EC) as amended by Directive 2004/42/EC and Regulation EC/1882/2003

Limitation of Emissions of certain Pollutants into the Air from Large Combustion Plants (2001/80/EC)

Eco-Labeling (1980/2000/EC)

EMAS (2001/761/EC)

Implementation of a European Pollutant Emission Register (EPER) (Commission Decision 2000/479/EC)

Chemicals

Dangerous Substances (67/548/EEC) as amended by Directives 69/81, 70/189, 71/144, 73/146, 75/409, 76/907, 79/370, 79/831, 80/1189, 81/957, 82/232, 83/467, 84/449, 86/431, 87/432, 88/302, 88/490, 90/517, 91/325, 91/326, 91/410, 91/632, 92/32, 93/21, 93/72, 93/101, 93/105, 94/69, 96/54, 96/56, 97/69, 98/73, 98/98, 99/33, 2000/32, 2000/33, 2001/59, Regulation EC/807/2003 and Directive 2004/73

list of Community legislation referred in Directive 67/548/EEC (2000/21/EC)

Deliberate Release into the Environment of Genetically Modified Organisms (2001/18/EC) as amended by Regulation EC/1829/2003 and Regulation EC/1830/2003/EC as well as Decisions 2002/623/EC and 2002/811/EC

Animal Experiments (86/609/EEC) as amended by Directive 2003/65/EC

Asbestos (87/217/EEC) as amended by Directive 91/692/EEC and Regulation EC/807/2003

Biocides (98/8/EC) as amended by Regulation 2003/1882

Contained use of GMOs (90/219/EEC) as amended by Directives 94/51/EC, 98/81/EC, Regulation EC/1882/2003 and Decision 2001/204 Risk Assessment of Existing Substances (EEC/793/93) as amended by Regulation 1882/2003

Ozone-Depleting Substances (EC/2037/2000) as amended by Regulations 2038/2000/EC, 2039/ 2000/EC, Decision 2003/160/EC, Regulation 1804/2003/EC and Decision 2004/232

Import & Export of Dangerous Chemicals (EC/304/2003) as amended by Regulations 1213/2003 and 775/2004

Noise

Household Appliances (86/594/EEC) as amended by Regulation EC/807/2003 Assessment and management of Environmental Noise Directive (2002/49/EC)

2. Key Environment Legislation with Links to Trade

The Directive on Sulphur Content of Liquid Fuels

The Directive on Emissions from Engines to be Installed in Non-Road Mobile Machinery

The Directive on the Quality of Petrol and Diesel Fuels

The Directive on Volatile Organic Compounds

The Waste Oil Directive

The Directive on the Disposal of PCBs and PCTs

The Hazardous Waste Directive

The Batteries Directive

The Packaging and Packaging Waste Directive

The Regulations on Shipments of Waste

The Directive on Contained Use of Genetically Modified Organisms

The Asbestos Directive

The Directive on Classification, Packaging and Labeling of Dangerous Substances

The Genetically Modified Organisms Deliberate Release Directive

The Regulation of Risks of Existing Substances The Regulation on the Export and Import of Dangerous Chemicals The Directive on the Application of the Principles of Good Laboratory Practice

The Directive on the Inspection and Verification of Good Laboratory Practice

The Directive on Classification, Packaging and Labeling of Dangerous Preparations

The Regulation on Information and Tests on EINECs Substances for Importers and Manufacturers

The Decision on the Summary Information Format Relating to the Marketing of Genetically Modified Organisms as or in Products

The Decision Establishing a Summary
Notification Information Format Relating to
the Release of Genetically Modified
Organisms, for Purposes Other than
Marketing

The Household Appliances Directive The Directive on Outdoor Equipment

The Regulation on Radioactive Contamination of Foodstuffs

3. Key Environment Legislation Linked to Industrial and Technology Upgrades

The Directive on VOC Emissions Resulting from Storage and Distribution of Petrol

The Municipal Waste Incineration Directives

The Hazardous Waste Incineration Directives

The Framework Directive on Waste

The Directive on the Landfill of Waste

The Waste Incineration Directive (WID)

The Urban Wastewater Treatment Directive

The Groundwater Directive

The Directive on Air Pollution from Industrial

Plants

The Large Combustion Plants Directive

The IPPC Directive

The Seveso Directive

4. Key Environment Legislation Relating to Transboundary Cooperation

The Water Framework Directive Community Framework for Co-operation in the field of Accidental or Deliberate Marine Pollution

The Reporting Directive

The European Environment Agency Regulation The Air Quality Framework Directive and Daughter Directives

The Decision on Monitoring Carbon Dioxide and Other Greenhouse Gas Emissions



Summary of Tools and Methods for Assessment of Environmental Capacity

Tool/Method	Short Description	Sources of Further Information
Tools and methods	EU TOOLS AND METHODS used for assessment of environmental capacity	
Annual reporting on implementation of Community environmental law	Member states of the EU are under the obligation to report via the Reporting Directive (Directive 91/692/EEC) system. The system covers 30 environmental Directives, mainly dealing with air and water quality, and waste management. The Reporting Directive system involves a series of questionnaires that are mandatory for Member States to use when reporting at stipulated intervals. Each Directive contains provisions requiring Member States to provide the Commission with information on the present environmental situation and/or the status of implementation.	COMMISSION STAFF WORK-ING PAPER Third Annual Survey on the implementation and enforcement of Community environmental law available at: http://www.europarl.eu.int/comparl/envi/pdf/implementation/com_sec (2002)1041_en.pdf Follow-up Reports on Implementation in the Environment Committee: http://www.europarl.eu.int/comparl/envi/implementation/follow-up-reports.htm Implementation of EU environmental law: http://www.europarl.eu.int/comparl/envi/implementation/default_en.htm Implementation of Environmental Legislation In Acceding Countries: Summary of question and answer session with the Commission on 2 December 2003 available at: http://www.europarl.eu.int/comparl/envi/pdf/implementation/is20031202.pdf

(Continued)

Tool/Method	Short Description	Sources of Further Information
Progress monitoring for adoption of environmental Acquis Communautaire	The European Commission's DG Environment has developed a Progress Monitoring Manual helping the accession countries to prepare progress monitoring reports in terms of adoption of environmental <i>Acquis Communautaire</i> . The Progress Monitoring Manual gives the guidance on Progress Monitoring of Approximation, Transposition and Implementation and helps to document that the legal obligations set forth in the environmental <i>Acquis Communautaire</i> have been satisfactory transposed and implemented.	DG Environment Progress Monitoring Manual 2004: http://europa.eu.int/comm/ environment/enlarg/pdf/pm3_ manual.pdf
Project of Environmental Enforcement Practices (PEEP)	The project on Environmental Enforcement Practices (PEEP) was designed to focus more towards understanding the differences and learning from the experience, in particular learning by actually following the inspections in more depth. Key objectives of PEEP are to provide an in-depth analysis of the inspection and enforcement procedures applied by inspectors in different EU countries; and deepen the present collaboration in joint approaches to problems by contributing to the learning of inspectorate functioning in these countries. To provide a common base for comparison, PEEP focuses on the control of installations covered by the Integrated Pollution Prevention and Control (IPPC) Directive (96/61/EG).	
IMPEL Review Initiative	The IMPEL Review Initiative (IRI) is a project of four phases designed to test a voluntary scheme for reporting and offering advice on inspectorates and inspection procedures. Phase 1 comprised design of a review mechanism, Phase 2 was a trial of the methodology in Denmark and Phase 3 involved trial review of regulatory systems in 6 volunteer EU Member States. Phase 4 concluded the review. It examined the results and the lessons learned, considered whether the review process had worked and formulated recommendations for its continuation. There are finalized reports of the trial of the methodology in Denmark and the reviews in Germany, Belgium, Netherlands, Ireland, France and Spain.	

Tool/Method	Short Description	Sources of Further Information
IMPEL Reports on Minimum Criteria on Environmental Inspections in EU Member States	These <u>voluntary</u> reports are required by the European Parliament and Council Recommendation 2001/331/EC providing for minimum criteria for environmental inspections. Member States report to the Commission on their experience of the operation of this recommendation using, to the extent possible, any data available from regional and local inspecting authorities. MS inform the Commission of the implementation of this recommendation together with details of environmental inspection mechanisms already existing or foreseen. IMPEL supports the principles and implementation of this	
	Recommendation on minimum inspection criteria for environmental inspections, the purpose of which is to ensure that environmental inspection tasks are carried out in Member States according to minimum criteria, thereby strengthening compliance with Community environmental law and contributing to a more consistent implementation and enforcement of that law.	
Tools/methods used within the Sustainable Cities/Urban Environment Initiative—local level, PRE-SUD	The European Common Indicators initiative is focused on monitoring environmental sustainability at the local level. A set of 10 environmental sustainability indicators have been developed in conjunction with stakeholders. The European Common Indicators are a ready to use, self-contained set of indicators that will help a town or city interested in the quality of its urban environment to begin to monitor progress. Towns and cities can adapt or add to the 10 indicators to suit local circumstances. The focus of the initiative is on helping towns and cities monitor their own progress rather than on collecting European level data on the state of the urban environment. The indicators are measured every one-two years. The overall objective of Peer Review for European Sustainable Urban Development (PRE-SUD) is to adapt the OECD's system of environmental performance reviews (peer reviews) for use by municipal stakeholders to advance European sustainable urban development, in particular to combine quantitative and qualitative approaches to measure sustainable urban development. The project has four principal objectives: Elaborate, Pilot, Implement, and Demonstrate.	Commission adopted Communication COM(2004)60 "Towards a Thematic Strategy on the Urban Environment": http://europa.eu.int/comm/ environment/urban/thematic_ strategy.htm#language_ versions DG Environment European Common Indicators webpage: http://europa.eu.int/comm/ environment/urban/common_ indicators.htm Report on European Common Indicators http://www.eu- ropa.eu.int/comm/ environment/urban/pdf/eci_ final_report.pdf http://www.sheffield.gov.uk/en- vironment/eco-management Presentation by Ing. Sandro Picchiolutto at the First (Continued)

Tool/Method	Short Description	Sources of Further Information
EM(A)S Certification for Municipalities	Registering of municipality under EM(A)S is possible and potentially leads to more sustainable environmental management within the municipality and better use of resources. In many cases investments are needed in order to improve environmental management. Possible stakeholders in the process of a city certification may include the city government itself, NGOs, experts, researchers and academia and ISO certification experts. Sheffield City, in which they introduced Eco-Management and Audit System, represents a very good example of effectiveness of such system.	European conference of Municipal Energy Managers, Stuttgart 1–2 July 2004
EEA Core Set of Indicators	 The European Environmental Agency developed a core set of indicators (37 indicators) as the key information provider on environmental issues at the European level. The goals of indicators are the following: Provide a manageable and stable basis for indicator reporting by the EEA on the web and in its indicators-based reports Prioritize improvements in the quality and geographical coverage of data flows, especially priority data flows of the European environment information and observation network (Eionet) Streamline EEA/Eionet contributions to other European and global indicator initiatives, e.g., structural indicators and sustainable development indicators. Indicators measure developments in selected issues, including progress towards agreed targets. They are based on ready available and routinely collected data for EEA countries within specified timescale (to be determined country by country) at reasonable cost-benefit ratio. The indicators are consistent in space coverage and cover all or most of EEA countries. They are primarily national in scale and representative for countries (countries benchmarking). 	EEA website: http://themes.eea. europa.eu/IMS/CSI
Tools and methods	in which environmental capacity is a PART of the overa	II assessment
Accession Partnerships and National Programs for the Adoption of the Acquis (NPAA)	Accession Partnerships are the first steps in the assessment of the status of the candidate countries and the needs for further progress during the pre-accession period and is drawn up by the European Commission for each of the Candidate Countries. It provides an assessment of the pri-	DG Enlargement website: http://europa.eu.int/comm/ enlargement/pas/aps.htm http://europa.eu.int/comm/ enlargement/index.htm

ority areas in which the candidate country needs to make

progress in order to prepare for accession (including envi-

Phare Program will support such accession preparations.

ronmental sector) and outlines the ways in which the

Slovak's NPAA: http://www.

INFOSERVIS/DOKUMENTY/

ACQUIS/en_nprogram.shtml

government.gov.sk/

Tool/Method	Short Description	Sources of Further Information
	NPAA gives details of each country's commitments with regard to achieving the Copenhagen criteria and adopting the 'Acquis Communautaire'. During the preparation of NPAA a detailed assessment of current capacities and steps for further progress by the governments of candidate countries is performed. The NPAA sets out in detail how the candidate country intends to fulfill the priorities of the AP and to prepare for their integration into the EU. NPAA complements and is a "mirror reflection" of the AP: it contains a timetable for achieving the priorities and objectives and indicates the human and financial resources to be allocated.	1998 Communication on Accession Strategies for Environment: http://europa. eu.int/comm/environment/ docum/98294sm.htm http://www.europa.eu.int/pol/ enlarg/index_en.htm
Pre-accession Screening	Screening is the term used for "reviewing" the <i>Acquis Communautaire</i> and comparing it with the legislation in a candidate country undertaken by the European Commission jointly with the Candidate Country. At the same time, it involves the identification of legal norms that are in compliance with the <i>Acquis Communautaire</i> , norms that need to be amended, and norms that need to be created. Screening helps to specify areas, in which transition periods or exemptions will be necessary.	website on the Cyprus-EU Accession Negotiations— Screening of Cyprus http://kypros.org/CY-EU/eng/ home.htm http://europa.eu.int/comm/en- largement/index.htm
Progress monitor- ing—The Regular Progress reports	The regular progress reports are the main instrument for monitoring of the progress process during the pre-accession period. The European Commission progress reports are prepared every year by the European Commission for each candidate country and they contain a detailed analysis of the progress made by the candidate countries. The purpose of this exercise was to identify issues to be discussed in more detail in the negotiations. In addition to the Regular Reports, the Commission prepares *Comprehensive Monitoring Reports* once negotiations on accession are finalized. The additional reporting and assessing tool consists of Progress Monitoring Reports, which are prepared within the Progress Monitoring Project by the consultant annually as well on the basis of Tables of Concordance and Implementation Questionnaires provided by the Candidate Countries to the consultant.	DG Environment Progress Monitoring Manual 2004: http://europa.eu.int/ comm/environment/enlarg/p df/pm3_manual.pdf Comprehensive monitoring re- port: http://europa.eu.int/ comm/enlargement/ report_2003/index.htm# comprehensive DG Environment enlargement website: http://europa.eu.int/ comm/environment/enlarg/in dex_en.htm DG Environment Guide to the Approximation of European Union Environmental Legislation: http://europa.eu. int/comm/environment/guide/ contents.htm (Continued)

Tool/Method	Short Description	Sources of Further Information
		Communication on Accession Strategies for Environment: http://europa.eu.int/comm/ environment/docum/ 98294sm.htm
EU Peer reviews	The overall objective of the Peer Review program is to ascertain whether adequate administrative infrastructure and capacity are in place in order to ensure effective implementation of the <i>Acquis Communautaire</i> (also in the area of environment). Peer Reviews serve to assist acceding countries by pinpointing areas that require further strengthening of the administration; by making recommendations on how such strengthening could be achieved, helping to target the use of subsequent technical assistance; and, as an additional information input to the Commission's on-going monitoring exercises. Peer reviews coordinated and implemented by TAIEX involved the full participation of the concerned countries' administrations, Commission Services and experts from Member States.	Technical Assistance and Information Exchange unit of Directorate-General Enlargement of the European Commission (TAIEX) web- page: http://taiex.cec.eu.int/ TAIEX activity report 2003 and for 2004 available at: http://taiex.cec.eu.int/ Peer Review Evaluation Mission on Environment in Hungary, Report Final Report, TAIEX OFFICE, 2002 European Commission: Strategy Paper and Report 2003: TO- WARDS THE ENLARGED UNION Strategy Paper and Report of the European Commission on the progress towards accession by each of the candidate coun- tries: http://www.fifoost.org/ EU/strategy_en_2002/strat- egy_en.php
Phare projects	Phare funds focus entirely on the pre-accession priorities highlighted in each country's Accession Partnership. Significant number of national and Cross-Border-Cooperation projects were either specifically related to the environmental <i>Acquis Communautaire</i> or included components related to environmental integration (such as in the context of development projects). Phare is providing support for institution building through "twinning" and technical assistance and investment support to candidate countries in their efforts.	Report on Interim Evaluation of the European Union Pre- Accession Instrument Phare, Country Romania, Sector Environment, EMS Romania, 17 December 2003

Tool/Method	Short Description	Sources of Further Information
	The Phare program has been subject to interim evaluation since 1996. Apart from the evaluation of the program itself, there is also evaluation administrative capacity and strengthening of the institutions conducted. Valuable recommendations (called 'Early Warnings') with respect to previous evaluations and NPAA are given in the evaluation reports.	
Twinning arrangements Pre-Accession Assistance for Institution Building	Twinning is an initiative of the European Commission that was launched in 1998 in the context of the preparation for enlargement of the European Union as the principal tool of pre-accession assistance for Institution Building. It was an instrument for targeted administrative co-operation to assist Candidate Countries to strengthen their administrative and judicial capacity to implement Community legislation as future Member States of the European Union. Twinning provides the framework for administrations and semi-public organizations in the new member states or candidate countries to work with their counterparts in Member States. They jointly develop and implement a project that targets the transposition, enforcement and implementation of a specific part of the <i>Acquis Communautaire</i> . An initial part of every twinning project is an analysis of the current situation in the Candidate Country within the scope of the project, performed by experts from the Member States by means of desktop studies, visits, working groups, reported and used as a baseline situation for further implementation of the project.	Strategy Paper and Report of the European Commission on the progress towards accession by each of the candidate countries, 2002: http://www.fifoost.org/EU/strategy_en_2002/strategy_en.php Twinning: A tested experience in a broader European context, report by the Institution Building Unit of DG Enlargement, December 2005
Transition Facility	Transition facility purpose is to continue to provide assistance to the New Member States in areas where their administrative and institutional capacity is still not able to deliver on a par with present Member States. The orientation of the Transition Facility is to continue institution-building activities according to the same principles as funded by Phare during the pre-accession period. Structures and methods established under Phare for programming and decision-making will continue to apply for the Transition Facility with some small adaptations.	
		(Continued)

Tool/Method	Short Description	Sources of Further Information
	The assistance addresses the continued need for strengthening institutional capacity in certain areas through actions which cannot be financed by the Structural Funds, including the following areas (among others): environment; veterinary services and administrative capacity-building relating to food safety; administrative and control structures for agriculture and rural development, including the Integrated Administration and Control System (IACS).	
Functional Review	Functional reviews are a key reform tool in the current approach to rebuilding systems of public administration. They assist governments to move towards a situation where public bodies collectively and individually perform all necessary functions, and only necessary functions. The overall objective of the functional reviews is to facilitate the Public Administrative Reform, whereas their specific objective is to provide recommendations for the rationalization and reorganization of the functional competences of public administration. The review analyses the institutions, assesses assigned competencies across different levels of government, focusing also on their financial viability, and analyses structure and staffing of each institution, including distribution of functions across institutions. The functional reviews have been recently used as a very effective tool to assess institutional capacity of environmental institutions in some of the countries.	http://ec.europa.eu/environment/ enlarg/pdf/task1_final_report. pdf http://www.un.org.yu/Attachment/ Serbia_forestry-FAO_project_ presentation.pdf
OECD Environmental Performance Reviews (EPRs)	The OECD's Environmental Performance Reviews (EPRs) provide a systematic overview of the efforts of member countries to reach their environmental goals and country-specific recommendations to improve performance. They assess progress in reducing pollution, in improving the management of natural resources, in implementing economically efficient and environmentally effective policies, and in strengthening international cooperation.	Environmental Performance Reviews (1st Cycle) Conclusions and Recommendations 32 Countries (1993–2000). OECD Working Party on Environmental Performance

Tool/Method	Short Description	Sources of Further Information
	The process uses the methodology of peer review—the report is prepared by the OECD Secretariat, and then is discussed in depth in the Working Party on Environmental Performance (WPEP), with representatives of all member countries. The first cycle of performance reviews for all OECD countries was completed in 2000, and a second cycle is now underway.	OECD Environmental Performance Review of Poland, 2003 http://www.oecd.org/topic/0,268 6,en_2649_34307_1_1_1_1_ 37465,00.html
Environmental Indicators (EI)— OECD indicators	Core environmental indicators—using them is a first step in tracking environmental progress and the factors involved in it, and it is a major tool for analyzing environmental policies and measuring environmental performance. Key environmental indicators—a small set of key environmental indicators selected from the OECD Core Set. Ultimately, the set is expected to also include key indicators for issues such as toxic contamination, land and soil resources, and urban environmental quality. Sectoral environmental indicators—Sectoral indicator sets concern linkages between the environment and the economy, placed in a context of sustainable development. They may include environmental indicators (e.g. pollutant emissions), economic indicators (e.g. sectoral output, prices and taxes, subsidies) and selected social indicators, which should facilitate the integration of environmental concerns in sectoral policy making.	OECD Environmental Indicators. Development, Measurement and Use. Reference Paper Discussion Paper at INECE- OECD Workshop on Environmental Compliance and Enforcement Indicators: Measuring What Matters. Prepared by: INECE Expert Working Group on Environmental Compliance and Enforcement Indicators, October 2003 http://www.oecd.org/ findDocument/0,2350,en_ 2649_34283_1_1_1_1_37465, 00.html
	Indicators to measure decoupling of environmental pressures from economic growth—they measure the decoupling of environmental pressure from economic growth over a given period. In conjunction with other indicators used in OECD policy analysis and country reviews, they are valuable tools for determining whether countries are on track towards sustainable development. Two major groups of decoupling indicators covering various environmental issues have been explored macro-level decoupling and sector specific decoupling. OECD and INECE Work on Enforcement and Compliance Indicators—assists enforcement agencies in evaluating and better managing their performance as well as demonstrating the results of government enforcement activities. Enforcement and compliance indicators are a	(Continued)

Tool/Method	Short Description	Sources of Further Information
	practical way for providing information on enforcement and compliance activities for policy purposes and help to improve the transparency and accountability. Measuring the performance of enforcement programs has been carried out in EECCA countries and various parameters have been used. Most countries measure activity levels, such as numbers of inspections and enforcement actions.	
Peer Reviews of Enforcement Agencies	Peer Reviews of Enforcement Agencies goal is to help countries to improve the performance of ENFAs, help governments to assess progress in this process, stimulate greater accountability towards public opinion and international partners, and establish a process of mutual support for ENFAs engaged in the reform of their institutions. The Reviews provide descriptive and quantitative information on the institutional and management framework for enforcement and compliance assurance, and assess enforcement strategies, tools and their impacts. The review also assesses compliance promotion efforts, including the role of the general public and regulated community. Performed in CEE and in the EECCA region.	Peer Review: A Tool for Co-operation and Change by Fabrizio Pagani, September 2002 EAP Task Force Secretariat/ OECD and EU Phare Program Review of the Estonian Environmental Fund http://www.oecd. org/document/9/0,2340,en_ 2649_34339_26408585_1_1_ 1_1,00.html
Performance Review of Individual Environ- mental Funds in both CEE and the NIS	Reviews of Individual Environmental Funds are voluntary audits requested by CEE/NIS Ministries of Environment and/or Fund officials. They were first lunched under the aegis of the CEE Environmental Funds Network, supported by the European Union's Phare Program and later on continued under the NIS Environmental Finance Network. Each review examines various aspects of the operations of a specific Fund (legal, institutional, organizational, technical and financial) and identifies institutional strengthening measures and reforms that would help improve fund effectiveness and efficiency.	EAP Task Force Secretariat/ OECD and EU Phare Program Review of the Estonian Environ- mental Fund http://www.oecd. org/document/15/0,2340,en_ 2649_34335_1838927_1_1_1_ 1,00.html
Public Environmental Expenditure Management	OECD developed the so called Public Environmental Expenditure Guidelines (PEEM), which is a kind of benchmarking for all forms of units (including budgetary or non-budgetary funds) disbursing public funds. This reviews were performed in CEE and now in NIS countries after the shift of OECD interest to this area. The PEEM document has been modified and will become the core of an OECD Council Recommendation which will be valid for all OECD member countries.	Good Practices of Public Environ- mental Expenditure Manage- ment In Transition Economies submitted by the EAP Task Force as a Background Docu- ment at the Kiev Ministerial Conference, May 2003

Tool/Method	Short Description	Sources of Further Information
		http://www.oecd.org/document/ 10/0,2340,en_33873108_ 33873739_2386314_1_1_1_ 1,00.html
UNECE Environmental Performance Reviews Program	Environmental Performance Reviews (EPRs) assess a country's efforts to reduce its overall pollution burden and manage its natural resources; to integrate environmental and socio-economic policies; and to strengthen cooperation with the international community. As a voluntary exercise, the Environmental Performance Review (EPR) is undertaken only at the request of the country itself. It starts with an agreement on the structure of the report between UNECE and high officials of the candidate country.	http://www.unece.org/env/epr/ welcome.htm



EU Recommended Minimum Criteria for Environmental Inspectorates (RMCEI)

Budget parameters

Compliance monitoring, assessment of reports from facilities—IPPC / others

Inspection burden and prioritizing parameters

Inspection and inspection efficiency parameters

- Total time and money available to the organization
- Time allocated per installation for: Permitting and inspection
- Costs allocated per installation for: Permitting, inspection and compliance monitoring, assessment of reports from facilities—IPPC/others
- Resources allocated for training of inspectors per inspector and total for the staff
- The amount of time and money allocated to develop ways of defining and/or monitoring the amount of prevented pollution
- The amount of time and money allocated for the inspectorate's research and development work.
- No. of IPPC-sites for inspection—specified into branch, size, complexity, risk etc.
- No. of other facilities for inspection—specified into branch, size, complexity, risk etc.
- No. of facilities with major, medium and minor lack of compliance
- No. of accidents
- No. of cases registered for appeals or complaints
- No. of complaints per inspector filed against inspectors
- No. and time extent of routine inspections per specified type of installation—per inspector and/or per group of inspectors
- No. of inspections conducted per year-on-site, disk study, total, induced by complaints etc.
- No of inspections conducted (simple, complex and very complex)
- Deviation from planned frequencies of inspection within different risk categories (i.e. high, medium, low) measured over a certain period of time

(Continued)

Resource account parameters

Qualification parameters

- No. of announced or unannounced site visits, distributed on low-, medium- and highly environmental friendly installations
- Quality of inspection reports
- No. of samples collected, measurements made and similar monitoring work
- No. of warnings to facilities
- No. of prohibition notices issued
- No. of orders and number of orders to pay a fine
- No. of cases reported to prosecution
- No. of complaints from citizens successfully dealt with, relative to total complaints sent to the inspectorate
- Resources used per "total inspection" for similar installations, but distributed on low-, mediumand highly environmental friendly installations
- Average time used for each site visit (including planning, carrying out, reporting and followingup) for enterprises in different risk categories
- Time saved by efficient coordination of the administrative processes cutting the time between inspection, inspection reports and prohibition notice, contravention processes and the application of fines
- Total amount of fines received
- Inspectors' level of education
- Variety of professional qualifications in the inspectorate
- Core competency of inspectors
- Salary of the inspectors (highly influencing personnel's qualifications)
- Resources for in-service training (also a budget parameter)
- Fluctuation of inspectors in the inspectorate
- No. of experts for one complex company
- No. of contact persons for a company
- Auditing of inspections (internal & external)
- No. of working programs and results
- Methods of supervising the instructors by superiors and prefixed administration levels
- Quality and quantity of the office equipment
- Quality and quantity of the technical equipment (for monitoring etc.)
- No. of just complains against inspectors
- Availability of quality standards or manuals

Inspection system parameters

Permitting or efficient parameters

Decision parameters

Service parameters

Inspection outcome parameters

- A simple, common risk-classification system for enterprises with discharge license
- Assessment of inspectorate's performance by number of disturbance reports as function of the level of limit values—when 'soft' limit values in conditions there should be as low a no. of reports as possible, but when 'stringent' limit values in conditions a low no. of reports may not be good!
- Independence of inspectorate and inspectors
- Confidentiality of inspectorate and inspectors
- Mechanisms of coordination with other central and regional environmental authorities in order to achieve know how sharing
- No. of facilities for permitting—IPPC / others
- No. of permits—IPPC / others—prepared per year per inspector or inspectorate
- Time to grant a permit—IPPC / others—after all necessary application documents are submitted
- Total cost for preparing a permit—IPPC / others
- No. of appeals against inspectorates' decisions permits, licenses, orders etc.
- No. of court procedures
- No. of appeals denied or granted by administrative court
- No. and rate of corrections to inspectorate decisions
- Handling time (e.g. no of days) from receiving an application to sign of decision—e.g. a license
- Meetings with Stakeholders
- Time taken to respond to correspondence/assess reports
- Rate of permits with and without participation of public
- No. of insights into official files (citizens or lawyers)
- Quality and quantity of public relations (print media, websites etc.)
- Results of questionings of companies
- Results of questioning citizens
- The amount of prevented pollution as a result of inspections
- The amount of prevented pollution in relation to the planned
- prevented pollution
- The fact that prevented pollution is planned and monitored



List of SEE Government Institutions with Competence for the Environment

List of Government Institutions with		Competence for the Environment	nment	
Country / Territory	Prime Environment Ministry	Institutions Subordinated to the Prime Environment Ministry	Other Ministries with Competence for the Environment	Institutions with Environment Competence Under "Other" Ministries
Albania	Ministry of Environment, Forestry, and Water Administration	 Institute of Environment Institute for Research on Forestry and Pastures 	 Ministry of Health Ministry of Transport Ministry of Industry and Energetics Ministry of Agriculture and Food 	 Institute for Public Health Hydro-meteorological Institute Soil Research Institute National Science Hydrocarbon Center Albanian Geological Service Institute of Nuclear Physics Institute of Biological Research Center for Hydraulic Research Center for Geographic Studies
Bosnia and Herzegovina Overall State	Ministry of Foreign Trade and Economic Relations		 Ministry of Foreign Affairs Directorate for European Integration 	 Institute for Standardization, Metrology and Intellectual Property
Entity FBiH	Ministry for Environment and Tourism		 Ministry of Agriculture, Water Management and Forestry Ministry of Health 	 Public Water Company for Watershed Area of Sava River Basin (PWCA Sava) Public Water Company for Watershed Area of Adriatic Sea Basin (PWCA Adriatic sea) Federal Meteorological Institute

Entity RS	Ministry of Physical Planning, Civil Engineering, and Ecology		 Ministry of Agriculture, Forestry, and Water Management Ministry of Health 	 Hydro-Meteorological Institute Republic Directorate for Waters Institute for Waters RS Power utility company Public Health Institute
Separate Brcko District	Department of Utilities		 Department of Public Works Department for Agriculture, Forestry and Water Management Department of Urbanism, Real Estate Affairs and Economic Development Department of Health, Public Safety and Community Services Department of Education 	
Croatia	Ministry of Environ- mental Protection, Physical Planning, and Construction	Environment Agency	 Ministry of Culture Ministry of Agriculture, Forestry and Water Management Ministry of Health and Social Welfare Ministry of Economy, Labor and Entrepreneurship Ministry of the Sea, Tourism and Development Ministry of Science, Education and Sport Ministry of Interior Affairs 	 State Institute for Nature Protection Environmental Protection and Energy Efficiency Fund National Public Health Institute Croatian Waters Regional Development Fund State Office for Radiation Protection State Office for Nuclear Safety Meteorological and Hydrological Service

	Institutions with Environment Competence Under "Other" Ministries	 Republic Institute for Health Protection Hydro-meteorological Service 	 Nature Protection Institute Institute for Public Health
nment (Continued)	Other Ministries with Competence for the Environment	 Ministry of Defense Ministry of the Interior Ministry of Economy Ministry of Agriculture, Forestry and Water Economy Ministry of Health Ministry of Transport and Communications Ministry of Labor and Social Policy 	 Ministry of Economy Ministry of Health Ministry of Agriculture, Forestry and Water Resources Ministry of Internal Affairs Ministry of Culture and Media
List of Government Institutions with Competence for the Environment (Continued)	Institutions Subordinated to the Prime Environment Ministry	• Environment Fund	 Environment Agency Hydro-meteorological Institute Center for Eco- Toxicological Research and Coastal Zone Management
nt Institutions with C	Prime Environment Ministry	Ministry of Environ- ment and Physical Planning	Ministry of Environ- ment and Physical Planning
List of Governmer	Country / Territory	FYR Macedonia	Montenegro

 Environmental Fund Recycling Agency Institute for Nature Protection Hydro-meteorological Institute Public Health Institutes 	
 Ministry of Agriculture, Forestry and Water Management Ministry of Economy Ministry for Capital Investments Ministry for Mining and Energy Ministry of Trade, Tourism and Services 	 Ministry of Energy and Mining Ministry of Agriculture, Forestry and Rural Development Ministry of Trade and Industry Ministry of Transport and Communication Ministry of Health Ministry of Public Services Ministry of Finance and Economy
Environmental Agency	Kosovo Environmental Protection Agency with two institutes: Institute on Nature Protection and Hydro-meteorological Institute
Ministry of Science and Environmental Protection	Ministry of Environ- ment and Spatial Planning
Serbia	Territory of Kosovo



Central and Eastern Europe (CEE) Case Studies

CASE STUDY 1 Monitoring of Sofia Municipal Council (2004–2005) (Bulgaria)

Description

The Project for Monitoring of Sofia Municipal Council (SMC) was initiated by the Open Society Institute–Sofia (OSI–Sofia). The goal was to guarantee public accountability, protect the public interest, and promote progress and development related to environmental issues. A panel of experts including representatives from three environmental NGOs was formed to conduct monitoring. Monitoring experts observed and evaluated the decision-making processes and outputs of the Sofia Municipal Council, particularly in the areas of urban planning and architecture; finance and budget; environment; and land use. The project also established an effective partnership among Bulgarian NGOs and local authorities, applied the principles of the Aarhus Convention, and worked to provide the citizens of Sofia with a cleaner environment.

Key Elements

Parties involved

Main stakeholders: The Sofia Municipal Council and its environmental commission, the municipality and the mayor. Indirect stakeholders were the citizens of Sofia.

Experts: A Coalition of 15 NGOs, including three environmental organizations, formed a group of experts to conduct Monitoring. Members of several citizens' initiative committees participated in selected monitoring activities.

Financing

Funding for environmental monitoring was provided by the Open Society Institute—Sofia (\$8,000)

Activities

Methods: Direct presence of NGO experts at the meetings of the SMC and its environmental commission; development of monitoring reports; meetings among members of the coalition monitoring different topics; drafting official letters to the authorities; conducting public events with media involvement to present monitoring results and maintain a web site.

Checklists and monitoring report forms were developed with the participation of the NGO Coalition to monitor progress and analyze meetings of the SMC and its environmental commission, regulations, reports, etc. Two official events (one after six months of monitoring and another after a year) where findings were presented to the SMC, Sofia Municipality, the media, and the wider public. The monitoring coalition met regularly to exchange information and fine-tune work. Information about the monitoring, as well as the six-month report and the final monitoring report were published on: http://en.osf.bg/?p=programs-pubadmin.

Results

 13 meetings of SMC and 22 meetings of its environmental commission were attended and monitored;

CASE STUDY 1 (Continued)

- 4 quarterly monitoring reports;
- A six-month consolidated monitoring report;
- Results of monitoring were presented to the wider public in two public events with wide media coverage
- The coalition promoted connections and working relations between experts from different fields.
- The SMC became more open to the public and began listening to citizens' voices, publishing information on its website, and taking other actions to improve its work;
- 2 NGO representatives began to help find a solution for Sofia's waste problem. It was a precedent setting activity for the municipality to include citizens in the decision-making process;
- Before the mayoral elections, the coalition gathered most candidates at a public event where they publicly signed a memorandum on "open management" of Sofia Municipality as a sign of their commitment to involve citizens more in the decision making process.

Drivers

- Implementation of EU directives on access to public information, EIA and SEIA;
- Previous work of the SMC and its environmental commission was non-transparent;
- A variety of problems in the city of Sofia including: destruction of green areas and parks; intensive construction that did not follow existing regulations; improper household waste collection and treatment; traffic congestion; and lack of relevant regulations at the municipal level to protect the environment.
- Interest of citizens to receive information on the work of the SMC and Sofia municipality.
- The SMC, its environmental commission and Sofia municipality acknowledged their own limited capacity to solve environmental problems in the city.

Success Factors

- Close cooperation and exchange of information among different stakeholders;
- Visibility and publicity of discussions;
- Development of monitoring checklists and reporting forms;
- Attracted suitable environmental experts to conduct the monitoring;
- Published project results and the monitoring reports on the site of Open Society Institute–Sofia;
- Conducting public presentations on the monitoring reports;
- Willingness of the SMC to follow the experts' recommendations and take measures to improve its work.

Lessons Learned and Recommendations

- In general, SMC lags behind in its obligation to create programs, regulations, strategies, related to the environment. Strategic environmental documents are now more broadly accepted when elaborated with the involvement of environmental NGO experts.
- Sofia Municipality had not regularly implemented decisions taken by the SMC. More active involvement of civil society in the monitoring and decision-making processes can help influence this.
- Sofia Municipality's supervision of implementation of SMC decisions was poor—many decisions dating back several years had not been implemented by the municipality and no measures were taken to change this situation. The monitoring project put those problems in the "public eye" and stimulated joint efforts towards their gradual resolution.
- The inclusion of citizens in the decisionmaking process lead to a more transparent SMC.
- Citizens expressed willingness to support initiatives that aim to improve their environmental and living areas.

CASE STUDY 2 BAT Information Exchange System—Czech Republic (CR)

Description

The Czech Best Available Technique Information Exchange System (BAT-IES) was developed based on the requirements of Directive 96/61/EC of the Integrated Pollution Prevention and Control (IPPC) and on prior experience with the EU BAT Information Exchange System. The Czech BAT-IES operates on four basic levels:

- Information exchange between the Ministry of Trade and Industry (MTI), the Ministry of Environment (MoE), Ministry of Agriculture (MoA), the Czech Environmental Information Agency (CENIA), and the Czech Environmental Inspectorate (CEI);
- Information exchange between ministries and regional authorities;
- Information exchange between ministries and companies;
- Information exchange with general public.

Four levels are available on the internet site www.ippc.cz, which is the key tool for IPPC and BAT-IES in the CR. BAT-IES was established to mainly support the IPPC process of application preparation and permitting issuing by regional authorities. The AT-IES is also a tool for technical working group (TWG) activities. In the CR 30 TWGs comprise over 400 experts from various industrial and environmental sectors. The main aim is to support the work of EU TWGs, including translation and interpretation of EU Best Available Technique Reference Documents (BREFs) into the national language. Representatives from the four levels mentioned above, and the TWGs meet twice a year for an Information Exchange Forum (IEF).

Key Elements

Parties involved

Main stakeholders: MoE, MTI, MoA, CENIA, CEI, TWGs, regional authorities.

MTI is the key coordinator for activities of TWGs, translations and reviews of BREFs, preparation of Czech input to EU TWGs, and operation of the internet site www.ippc.cz.

Industrial sector TWGs are usually led by the relevant sector association while other members come from IPPC companies, research institutes, universities, consulting companies, CEI, CENIA—Agency for Integrated Prevention.

Other stakeholders include Information Exchange Forum representatives from the 14 regional authorities, and environmental NGOs.

Financing

Financing for BAT-IES is from the state budget. A small amount of funding comes from industry.

Activities

Meetings of TWGs and IEF, translations, electronic information exchange within various levels of groups, publications of reports on BAT-IES operation, and BREFs on www.ippc.cz

Results

- In 3 years of operating the BAT-IES, there have been 6 meetings of the Information Exchange Forum that provided important stakeholder feedback to MoE and other ministries on problems with implementation of the Czech IPPC legislation. As a result, amendment of the IPPC Act was initiated.
- The most important result is the creation of an effective system for BREF translation, so that the Czech translations of BREFs are available on the website within approximately one month of publication of the English version on the EU website.
- Improved mutual understanding between representatives of industry and regulators.

Drivers

 Pressure was related to the division of responsibilities/competencies during preparation of (Continued)

CASE STUDY 2 (Continued)

the IPPC Act. When MTI asked to participate in the IPPC system and help the dialogue with industry over BAT implementation, there was a fear of overly strict interpretation of IPPC directive requirements by the MoE and permitting authorities.

Czech industries were interested in contributing to the preparation of EU BREFs and the
BAT-IES allows them to take part in the EU
TWGs. They have been involved as necessary,
in adjustment of national BREFs to local
technologies.

Success Factors

- Good funding by MTI convinced MoE and MoA to collaborate on the BAT-IES;
- Stability of resources;
- Involvement of a wide range of IPPC stakeholders;
- Translated BREFs were widely used during the application preparation and integrated permitting negotiation;
- Industries were informed about environmental requirements by the BREFs;
- Experts from technical universities participated in the interpretation of BREFs, thus enabling

cooperation on technological applications in practice and enhancing experience for further education.

Lessons Learned and Recommendations

- Cooperation between ministries was very important, particularly for initial set up of the system;
- The functional BAT-IES shows that other ministries can be involved and take a leadership role within their competencies, especially if they can contribute more resources to the task, even if MoE is responsible for implementing an environmental directive (e.g., IPPC);
- Involvement of regulated industries, permitting bodies and inspectors in discussion on implementation of BAT helps them to not only to understand the legal requirements but also helps fine-tune the interpretation of BAT-related Czech terminology;
- Local (national) conditions are important and IPPC can be adapted to local industry needs.
- Involve as many local experts and industries as possible.

CASE STUDY 3 Environmental Investment Centre (Estonia)

Description

The Environmental Investment Centre (EIC) was established in May, 2000 on the basis of the Estonian Environmental Fund, under the authority of the Ministry of Finance.

The EIC is an effective tool for implementing the following:

 Using money from environment fees for development of national environmental projects;

- Serving as an Implementing Agency for structural Fund projects;
- Serving as an Implementing Agency Cohesion Fund projects;
- Offering long-term loans to environmental projects.

EIC was created mainly for the development of public sector organizations such as local governments with waste and water projects, and their public companies. EIC also funds environmental investments for private and state owned

CASE STUDY 3 (Continued)

companies. The Ministry of Environment (MoE) and its structures are also EIC's clients.

Key Elements

Financing

100 percent from environmental taxes (levels were raised during the accession period). EIC is a separate line in the Ministry of Finance budget.

EIC does not collect money. Money is collected and monitored by MoE. MoE forwards the taxes to the state budget and it gets transferred later to IEC.

Structural Funds—EIC co-financed 9.5 million EUR in the period 2004–2006 (for water protection and use; renewable energy; waste management; biological and landscape diversity).

EU Cohesion Funds—As EIC was an implementing agency for ISPA, it also became an implementing agency for the Cohesion Funds. It co-financed about 150 million EUR in the period 2004–2006.

EIC also serves as a financial intermediary for the Nordic Investment Bank, for major environmental investments such as water management, waste management and renewable energy projects.

Results

- 9.5 million EUR spent on environmental projects within the European Regional Development Fund;
- 150 million EUR spent on environmental projects within the Cohesion Fund;
- Almost 1,700 environmental projects were financed in 2004;
- In 2004 the EIC worked on 15 investment projects and 12 ISPA projects on technical help.

Drivers

 Political will to create a functional and transparent environmental financing institution to

- become an implementing agency for EU Structural and Cohesion Funds;
- Financial capacity increased, creating new possibilities for making larger environment investments;
- EIC was created in 2000 on the basis of the Environmental Fund and inherited EF's knowhow and expertise in managing projects;
- Existence of a transparent legal framework that directed all environmental fees to the EIC.

Success Factors

- The government decision to create EIC as one organization that helps administer all environmental funding (internal and external; soft and infrastructural).
- Available environmental pollution fees and a legal framework specifying that fees will be used only for environmental development purposes.
- EIC maintains independence but EIC council helps in some project funding decisions;
- Availability of good applications due to ongoing seminars and training for beneficiaries.
- Constant training of EIC personnel on new procedures, and provision of information to target groups on using them.
- Secondment of external experts for one year: procurement specialist from Finland, Swedish financial expert and environmental specialist from Denmark.
- EIC has representatives/consultants in all 15 counties. Their tasks include project consulting, receiving applications, and project implementation monitoring.
- Clear and transparent procedures helped to make EIC a trustworthy institution.

Lessons Learned and Recommendations

- One consolidated implementing organization to help finance EU-grant investment is adequate in a small country;
- Separate specialized institution for environmental investments overcomes some of the rigidities of budgetary spending.

CASE STUDY 3 (Continued)

- A very stable legal basis was needed to secure constant support from government and users;
- Transparency and accountability are crucial to create an atmosphere of trust and attract additional funding;
- An early view of becoming an implementing agency for pre-accession and post-accession EU funds should be established for new funds.

CASE STUDY 4 Baltic Environmental Forum (BEF) (Estonia, Latvia and Lithuania)

Description

BEF was founded in 1995 by the Baltic Ministries of Environment, Germany and the European Commission as a special multilateral technical assistance project aimed at strengthening cooperation among the Baltic environmental authorities and building their capacities. Its headquarters are in Riga, Latvia, where the majority of its staff are located. It provides practical support for environmental co-operation as laid down in a trilateral agreement of the three Baltic governments in 1995. BEF focused on extensive training and consultation on EU environmental law approximation for officials and specialists from Ministries of Environment in the three Baltic States. BEF covered implementation (exchange of experience between Baltic states and old Member States) and enforcement issues (controlling, inspectors work, violations etc.). With EU accession, the technical assistance project ended. However, to keep the networks active and to implement more projects in the Baltic Sea Region, the BEF team founded NGOs in Latvia, Estonia, Lithuania, and Germany in 2003.

Key Elements

Parties involved

Main stakeholders: Environmental ministries and their sub-organizations, such as environmental services and inspectorates of the three Baltic States; academic institutions; local experts; industry, academic institutions, and NGOs. MoEs were the 1st

target with their subordinate structures on the national and regional levels. Ministries, to some extent, were lobbying financing decisions for projects (and trainings) implemented by BEF in front of EC Directorate General Environment and Bilateral Donor states (Germany, Sweden, Finland, and later Denmark). Depending on topics covered by trainings, additional stakeholder groups were invited. At a late stage of accession, a special program for Municipalities was developed.

Experts: The main experts and funding came from the closest neighbors—Finland, Sweden, Germany and Denmark MoEs, environmental funds, and consultancy companies.

Financing

Financing was secured from diverse sources. During 1995–2004, BEF implemented 5.3 million EUR of projects. BEF was originally financed as the assistance program from the German Government to the Eastern European region. The European Commission, Germany, Finland, Sweden, and the Baltic States provided funds for BEF activities, team and offices. Germany was a major donor through the entire period from both the federal and Lander levels. Success of BEF was based on long-term financial commitments from beneficiaries and the EC, as well as from donors. This provided a 2–3 years window for implementation. Additional fundraising was done for large long-term programs related to nature and chemicals. A steering group consisting of the beneficia-

CASE STUDY 4 (Continued)

ries (Baltic Ministries of Environment), the donors and observers met bi-annually on the project program and supervised the budget.

Activities

Methods: Seminars, meetings of high level officials, specialists, experts on all levels, workshops, expert meetings and publications where environmental performance of the Baltic states was compared with an extensive database using visual graphs.

Methodology: Developed by BEF staff and external experts. BEF covered all environmental directives. Training on methodologies to implement EU Directives was organized (for example, tools for selection of NATURA 2000 sites). Seminars enabled officials of the three Baltic states to exchange experiences amongst themselves.

Seminar topics were based on the discussion issues suggested by participants. For the majority of workshops it was a self-developing process, where previous meetings generated issues for next meetings.

Results

- During this period over 500 seminars and workshops took place, 5,000–6,000 participants were served, and projects worth 5.3 million EUR were implemented.
- A strong network of environmental authorities in the Baltic States was created.
- Improved capacity of the local team, which provided a chance to develop further as environmental experts.
- The Program received very positive feedback from participants.

Drivers

- In the Baltic States, legislation before the accession period was similar providing a good basis for sub regional cooperation.
- Assistance was requested and paid by the ministries and through international/EU funds to assist the Baltics.

 Turnover of personnel in MoE was very high, resulting in a continuous lack of capacity and reliable people with a long-term perspective.

Success Factors

- Good core funding (multi-source) enabled development of topics well in advance.
- Activities of BEF were tailor made for beneficiaries, based on their needs.
- Competent local team as well as committed and excellent experts from Old Member States worked together.
- Strong government support and acceptance, with initiatives often coming from national Ministries. BEF also had a political mission, as it was the executive office of the Baltic States Environmental Ministers Council.
- BEF had a monopoly in providing services to Ministries of Environment during the accession process.

Lessons Learned and Recommendations

- Feedback from beneficiaries was important.
 Questionnaires were used to evaluate activities. BEF was very well perceived by all beneficiaries and donors.
- Stakeholders were insufficiently involved in development of the national legislation and decision-making.
- Some early seminars were less effective because topics were too new and complex for participants and responsibilities in the countries were not yet set (for example GMOs in 1999).
- All seminars were free of charge. It was decided in hindsight that there should also be some kind of participant contribution (e.g., a small participation fee).
- The project should be adjusted to the local conditions to implement a similar project in West Balkans.
- It is important to involve as many local experts as possible and invest in building capacity in the countries instead of using external consultants services.

CASE STUDY 5 Establishing the NATURA 2000 Network in Hungary: Implementation of the EU Nature Conservation Regulations, the Birds and Habitats Directive

Description

In response to accession requirements, Hungary increased its territory under protection from less than 10% to 21%. The Natura 2000 network designated 1.91 million hectares for protection under the EU Birds (79/409/ECC) and Habitats Directives (92/43/ECC). The network includes 55 Special Protection Areas (SPA) under the Birds Directive and 467 Special Areas of Conservation (SAC) under the Habitats Directive. The two systems have an almost 42% overlap, and they include partly or fully 4-500,000 individual holdings. This resulted from a process several years long that mobilized a large group of different stakeholders. This process was very complex and difficult and longer than expected due several problems (see below). The government decree announcing Natura 2000 sites was issued in October 2004, with a significant delay of five months. As a result, Hungary had warnings from the EC of a possible withholding of Structural Funds. In spite of this delay, the network ultimately received a positive evaluation from the Commission, stating the number of sites and their extent sufficient for ensuring a "favorable conservation status" of species and habitats of community interest.

Key Elements

Parties involved

Preparations for the designation of Special Protection Areas (Birds Directive) and Special Areas of Conservation (Habitat Directive) began in 2000 and 1993 respectively and involved the following players:

- The Nature Conservation Agency of the Ministry of Environment and Water;
- 10 National Park Directorates (as the regional official bodies responsible for Nature Conservation in 10 regions of the country);

- NGOs: MME/Birdlife Hungary; WWF
 Hungary; MTVSz/Friends of the Earth
 Hungary; CEEWEB—Central and East
 European Working Group for the Enhancement of Biodiversity (these organizations are
 part of the NGO working group on Natura
 2000 established in September 2002 and are
 signatories of the official agreement with the
 Ministry of Environment and Water on communicating the Natura 2000 network to different stakeholders and the public at large);
- Scientific Institutions: Institute of Ecology and Botany of the Hungarian Academy of Science; Institute of Geodesy, Cartography and Remote Sensing; the Hungarian Nature History Museum; and the Hungarian Biologist and Conservationist Society with more then 171 botanists and zoologists directly involved;
- Ministries: Ministry of Environment and Water; Ministry of Economy and Transport; Ministry of Agriculture and Rural Development; Ministry of Defense;
- Öko Inc., Consulting company in Hungary (www.oko-rt.hu);
- International partners: Royal Society for the Protection of Birds, UK; ADAS Consulting Ltd. (UK); CEEN Consulting (Austria); Finnish and Spanish pre-accession advisors (Carlos Villalba, Outi Airaksinen).

Financing

Funding for the designation of Natura 2000 sites and its communication to various stakeholders originated from various sources, including preaccession funds through several PHARE projects and national funds.

Activities, methods

Implementation of Natura 2000 in the introductory stage included:

 Developing concrete proposals for site designation (with the necessary

CASE STUDY 5 (Continued)

- background research, analysis and mapping);
- Preparing the list of individual holdings based on their reference numbers in the national land cadastre;
- Developing the necessary legislative basis government decrees and regulations—in coordination with various ministries;
- Communicating results, informing relevant stakeholders and the public.

The process built on the data and experience of many different programs focusing on mapping and monitoring species. The task was to confirm existing results and add "new components" according to requirements of the two directives. The designation of Special Protection Areas for birds was based on the data and concrete site proposals of National Park Directorates delivered in 2000 and the Important Bird Areas network designated by MME/Birdlife Hungary, together with the results of several other monitoring programs carried out by the NGO. The designation of Special Areas of Conservation (Habitat Dir.) was carried out based on the results of the CORINE Biotope program (1994-1996); the National Biodiversity Monitoring System (launched in 1997 with PHARE support); National Ecological Network (developed as part of the Pan-European Ecological Network); national survey of "ex lege" protected mires and alkaline lakes; survey of the National Forestry Database; the IBOA (Intensive Botanical Data Gathering) program launched in 2000, and extensive research of the manuscript database of the Nature Conservation Agency. Once data on species and habitats was collected, special GIS software was developed to support the accurate evaluation of site proposals. The main initiative supporting implementation of the Natura 2000 network was the PHARE project "Preparation for Implementing the Habitats Directive in Hungary".

Scientifically justified site proposals were used to draft the relevant government decrees, which went through a harmonization and discussion process among several ministries (see above). In 2004 a communication campaign was launched by the Ministry of Environment and Water in cooperation with four major nature conservation NGOs (see above). The campaign provided general data on the Natura 2000 network through public forums, publications and posters prepared by NGOs funds (of app. 40,000 EUR) from the Ministry. Additionally, National Park Directorates organized public hearings for local land owners. As an important step towards the wide dissemination of results, the MME/Birdlife Hungary and the Nature Conservation Agency prepared and maintained a comprehensive web portal (www.natura.2000.hu) dedicated to Natura 2000.

Results

- 5 months of delay in implementation.
- The natural heritage of the country received a higher level of protection; original 9.6% in protected areas was increased to 21% of the national territory.
- The designation and introduction process helped to organize the results of several different programs under one coherent effort.
- Areas mapped and announced were the basis for compensation payments to farmers and land owners.
- More community funding for nature conservation could become available through the EU Structural Funds, LIFE Program and LIFE+ (from 2007 onwards).
- The network can provide a sound basis for sustainable rural development in some areas and can contribute to tourism development with new eco-tourism attractions.
- The Natura 2000 "brand" created a good basis for raising public awareness on nature conservation.

CASE STUDY 5 (Continued)

Drivers

- Strict deadlines given by the European
 Commission; EC warnings acting as "sticks;"
 Dedication of the Ministry of Environment
 and Water to respond in a professional manner;
 NGOs organizing around the issue at an earlier stage and regularly communicating delays
 and problems to the government in a constructive manner (expressed public interest);
- (4) Know-how support provided by other EU members states (twinning); (5) Direct financial support of the EC.

Success Factors

- The designation of sites built upon results of existing programs—the project did not start from zero;
- The structure of the administration (National Park Directorates on the regional level and Nature Conservation Agency on the national level) proved to be sufficient for systematic data collection;
- A new ministry department was established just to coordinate the work of different players;
- An extensive group of experts and institutions was mobilized—i.e., government, academia and NGOs;
- Direct funding was provided through the Phare program, along with the experience of pre-accession advisors from other EU members states;
- Cooperation between the government (Nature Conservation Agency) and NGOs (the Natura 2000 working group) helped communication.

Lessons Learned and Recommendations

Some of the key problems:

- Cooperation among different ministries was weak, resulting in a lengthy harmonization process;
- Database was insufficient at the beginning and data collection began with insufficient coordination—the relevant official department was

- established too late, just two years before the planned finish;
- Funds allocated were not sufficient and staff were constantly overloaded;
- The list of land registration numbers was announced for public debate 6 months after the sites were announced;
- Detailed regulations for site management, restrictions for land users, and the institutional background for providing compensation payments to farmers were delayed in development;
- Communication and the provision of information was not sufficient;
- Investments occurred that risked the natural status of certain sites partly as a result of delays and uncertainties.

Recommendations:

- Start early, and use existing structures (expert networks, institutions) and programs (CORINE, IBA, etc.);
- NGOs can add significant value in both data collection and (local level) communication;
- Allocate sufficient funding, establish an official coordination body, and engage experts from other EU countries;
- Use pre-accession funding mechanisms for capacity building and background data collection;
- Maintain a good land registry that allows for easy identification of holdings within Natura 2000 sites;
- Develop compatible funding mechanisms for agriculture (e.g., agro-environmental/LFA schemes could take up the provision of support to farmers with land in Natura 2000 sites);
- Mobilize sufficient political will and ensure good cooperation among the different ministries from the early stages (e.g., interministerial body with one person in every relevant ministry);
- Inform stakeholders about implementation at every stage, and plan time for debates.

CASE STUDY 6 Project to Assist Latvia in Approximation of European Union Laws Concerning Industrial Pollution Prevention and Control and Environmental Management of Industry (Latvia)

Description

The main goal of the project was to assist Latvia in implementation of the IPPC directive's requirements (establishing an environmental permitting system based on an integrated approach, implementation of BAT principles, better environmental management in the industrial sector, and public involvement in decision making).

The project contained 5 components:

- Approximation of the legal framework.
- Establishment of regulations and feasible administrative procedures for an integrated permitting system.
- Development of strategies to move Latvia's large industrial plants towards application of best available technologies and techniques.
- Capacity development of Latvian environmental officials in applying procedures for issuing and managing integrated permits.
- Dissemination of information and awareness– raising among the Latvian industries on the EU's requirements for IPPC.

The Integrated Pilot Permitting project in Latvia was planned as a follow-up to the ongoing IPPC project. The project aimed at assisting Regional Environmental Boards and 6 pilot industries in preparing and issuing legally valid IPPC permits pursuant to the Latvian IPPC legislation.

Key Elements

Parties involved

Main stakeholders: The European Union Integration Unit of the Ministry of Environment, and the Riga Regional Environmental Board were responsible for overall project co-ordination and implementation.

The 7 pilot enterprises involved in the project provided sufficient information and were willing and able to participate fully in all activities.

Representatives from 74 companies and 8 industrial associations took part in the Final Industry Conference.

MoE staff, specialists of the Regional Environmental Boards (REBs), State Environmental Service (SES), and Environment State Bureau (ESB) were interested in training activities. Evaluations at the end of study tours and training courses, as well as during discussions with participants showed activities were of a high quality. Ministry of Finance, Industrial Policy Department of Ministry of Economics and Latvian Development agency were involved in discussions and training on financing needs of enterprises.

Financing

The project was financed by the Danish ENPA. The Environmental Protection Fund of Latvia provided supplementary financial support to the project. At the beginning of the project, the budget was DKK 5,558,245 plus contingencies of 10%.

As part of the Cost Assessment activity, enterprises were informed about possibilities of the Environmental Investment Fund of Latvia.

Activities

- Information seminars in 8 REBs; 3 seminars on legal issues concerning IPPC.
- 2-week study tour to Denmark for Project Manager, and 2-week study tour to Denmark for 20 participants including 7 representatives from enterprises and 13 officials from REBs.
- 5-day training courses in Latvia for 40 representatives of environmental authorities.
- 6 pilot permits that can be used as best practice examples.
- Comprehensive "on-the-job training" for the industries and permit issuers.
- Translation of seminar materials and discussion papers into Latvian and dissemination

CASE STUDY 6 (Continued)

- in order to get responses from target groups.
- Involving specialists in detailed discussions concerning more specific issues.

Results

- Relevant environmental authorities at national and regional levels were informed and gained knowledge about permitting, BAT, and cleaner technologies (CT).
- Effective capacity building for the relevant authorities and industries.
- One-month study tour for the Latvian Project Coordinator and other MoE/REB officials.
- Study tour to Denmark for 20 MoE officials.
- Training in Latvia for 40 environmental officials.
- Three Project Documents were prepared for

 (1) Integrated Pilot Permitting Project on IPPC,
 (2) Training on BAT for specific IPPC industry sectors, and (3) Project on environmental regulation of category B and C installations.
- 7 Latvian enterprises prepared environmental action plans and obtained valuable experience and consultancies from Danish and Latvian consultants, free of charge. Training was provided free of charge for industry specialists.

Drivers

- Apply need to BAT and CT principles in production activities.
- Relevant support provided from European Integration Unit (consultancies, drafts of different documents, invitations to seminars, creating an IPPC homepage, participation in seminars organized by IPPC project, etc.).
- Very fruitful co-operation with environmental staff responsible for environmental issues in enterprises and audit group members.

Success Factors

 Good co-operation links were established between IPPC project consultants, the project group, and industrial enterprises. The 7 pilot enterprises involved in the project provided sufficient information and were willing and able to participate fully in activities.

Lessons Learned

- The practical experience obtained during environmental auditing of enterprises, study tours to Denmark, and training courses in Latvia were very valuable.
- The study tour to Denmark for environmental officials and representatives from the pilot industries provided a good understanding of integrated permitting systems in practice and had a significant positive impact on further project activities.
- The involvement of representatives from the pilot enterprises in the study tour and in training courses contributed to better co-operation and the development of good dialogue opportunities in the future.
- Translation of seminar materials, relevant reports and discussion papers into Latvian and dissemination to target groups, as well as involving specialists in detailed discussions concerning more specific issues, (for instance, the content of guidance documents) contributed to the quality of these documents.
- Technical staff of Riga REB provided additional assistance, including secretarial services (correspondence before large seminars, photocopying materials) and technical troubleshooting (electricity, Internet connection).
- Some EU legal terms (e.g. installation, BAT, operator) were quite new for Latvian legal documents, or were traditionally used with other meanings (e.g. "control" only as "inspection"). Terminology used in the latest legal drafts reflects the latest understanding of terms and is now accepted by Legal department of MoE.

Recommendations

 Promote private sector consultant centers/ companies or networks of consultants and

CASE STUDY 6 (Continued)

- create a good information exchange network. Provide assistance for strengthening and developing local consultant services for preparation of IPPC applications.
- Carry out sector specific training programs for industries, environmental officials and consultants in BAT and the integrated approach. A project document was prepared by the IPPC project for that purpose.
- Investigate all possible funding opportunities for the implementation of BAT and establish financial support mechanisms.
- Develop co-operation with local municipalities on environmental permitting issues (IPPC-EIA-spatial planning).
- Carry out socio-economic investigations in regions concerning the IPPC implementation strategy and plan, and feed the assessments into strategic IPPC decision-making.

CASE STUDY 7

Merging and De-merging of Ministries of Environment, Waters and Forestry with the Ministry of Agriculture within the Ministry of Agriculture, Environment, Waters and Forestry (Romania)

Description

In June 2003, Romania's government was restructured with the declared aim of reducing bureaucracy, increasing efficiency and improving inter-sectoral coordination. The number of ministries was reduced from 23 to 14, and an Agency for Government Strategies was established. In parallel, to align Romania's administration to EU standards and continue decentralization, an Action Plan on public administration reform was adopted at the top political level. As part of this reform, the former Ministry for Waters and Environmental Protection (MWEP) and the former Ministry for Agriculture, Forests and Food were merged into the new Ministry for Agriculture, Forests, Waters and Environment (MAFWE). The former Minister of Environment lost his cabinet position and the new Minister of the newly created ministry was appointed. Two high-ranking officials remained in position: the State Secretary for Environment and the State Secretary for Waters Management, coordinating two respective General Directorates in the MAFWE. In parallel, all country level EPAS

(LEPAs) were transferred to the authority of the newly established ministry. The National Environmental Guard, a young institution at the time, was transferred to the National Authority for Control (NAC). NAC was created a few months earlier in 2003, in response to the need for better coordination of all control and inspection activities in several fields of legislation: compliance with fiscal regime, labor regime, etc.

Key Elements

Parties involved

Main stakeholders: Political appointees, technical staff in the environmental administration, and external assistance project teams.

Activities

The respective administrative model was decided at a high political level in the Governing Party, since it was felt that it would better respond to the performance requirements of the European Commission for integration. Highlevel ceremonies were organized for appointing new public figures for each position in the

CASE STUDY 7 (Continued)

reformed cabinet, coupled with numerous press events. In parallel, operational budgets were reduced by 30% for LEPAs and employment schemes were blocked, with the declared aim of ensuring a significant reduction in public expenditures. Previous nominations for national focal points of various International Conventions and foreign technical assistance programs in the MoEWM were revised to fit the new organizational chart.

Results

- Early on the new administrative structure revealed its limited capacity to deal with the heavy workload required by the elaboration of implementation plans and position papers. This significant workload had to be shouldered by a few staff from different technical Departments in the new enlarged Ministry (e.g., Waste Management, Pollution Prevention, Biodiversity) and their counterparts in the 41 LEPAs.
- The slow progress in preparing and conducting negotiations on Chapter 22 of the
 Environmental Acquis obligations (which opened in January 2004), attracted critical remarks in the 2004 EU Country Progress
 Monitoring reports.
- In parallel, the newly created Regional EPAs (REPAs) required additional financial resources and coordination capacities in order to work properly.
- The coordination between LEPAs and County Commissioners at the local level was increasingly difficult, since they operated under two different planning and decision-making institutional frameworks.
- Overall progress of the project activities from donors slowed down until leadership responsibilities and coordination arrangements were clarified within the newly established Ministry.
- In March 2004, following the receipt of 3 red flags by the European Commission for the

Chapter 22 Environment (amongst the last 8 to be closed for negotiations), the Ministry of Environment and Water Management was again separated from the Ministry for Agriculture, Forests, Waters and Environment, following almost 9 months of an unsuccessful attempt to increase the performance of the central environmental administration.

Drivers

The high level political process was triggered by a need for streamlined central administration processes to meet most of the EU Accession conditions by mid-2004, and in view of increasing visibility of the governing party for general elections held in the same year.

Lessons Learned and Recommendations

- In general, major restructuring processes of the central environmental administration are not likely to yield short-term results, if both positive and negative institutional consequences are not thoroughly assessed beforehand.
- Merging the responsibility for environmental policy-making and management with the coordination role for a key economic sector—agriculture at the Ministry level—lead to confusing and contradictory roles for the different departments. Likewise, the territorial agencies responsible for the two different functions, Local EPAs, (environment), and County Directions for Agriculture and County Directions for Forestry continued to carry out their activities with limited coordination among themselves.
- Separation of decision-making between enforcement and regulatory/licensing environmental bodies (the Romanian NEG and LEPAs) proved to be in itself a constraining factor for environment Acquis implementation capacity.

CASE STUDY 8 Environmental Impact Assessment Unit (EIA Unit) at the Ministry of Environment and Documentation Centre for EIA (Slovakia)

Description

The EIA unit was created at the Ministry of Environment in 1994 in response to the Espoo Convention. The EIA unit is responsible for managing and regulating the process of environmental impact assessments on all levels (national, regional and local). It provides practical support for the environmental impact assessment process as laid down in the Law on Environmental Impact Assessment (127/1994, as amended in 2000 and replaced in 2006).

From 2001, the EIA unit was involved in a technical assistance project (a Phare twinning 700,000 EUR) aimed at implementation of the EU Directive on environmental impact assessment and increasing local capacity (both institutional and human resources) to conduct environmental impact assessments. From January 2002, the Documentation Centre for environmental impact assessments was established at the subordinated agency Slovak Environmental Agency and its 7 regional centers as a "complementary unit" dealing with EIA. The Documentation Centre is responsible for keeping records on environmental impact assessment processes (all documentation from the process, final statements, correspondence, etc.), maintaining a library on impact assessment (methodological guidelines, publications), maintaining an electronic information system, providing information to all actors of the EIA process including the public, and delivering hands-on trainings for civil servants and municipalities on impact assessment procedures in state regional and local offices and municipalities.

The EIA unit focused on (1) preparation and implementation of relevant legislation on impact assessment, (2) preparation of guidelines and manuals for civil servants, and (3) a framework for an extensive training and consultation process about environmental impact assessments

for line ministries, state environmental offices (regional and local) and municipalities.

The unit does not have any enforcement mandate in the EIA process (i.e., quality control of the assessments, regarding SEFA, or power to intervene if the assessments do not correspond to certain standards). No sanctions exist if impact statements are not presented in the Explanatory Memoranda attached to draft legislation for Governmental approval.

Key Elements

Institutional anchoring

Since its creation, the EIA unit has been placed in various substantive departments of the Ministry of Environment. In 2001, it was shifted to the direct authority of the State Secretary (deputy minister) to foster recognition of the topic's importance. This solution not only increased the awareness and recognition of EIA, but also increased the influence of unit's employees on the implementation and enforcement of EIA within the Ministry. EIA as an integrating topic managed to coordinate proposals coming from substantive departments and, employees were able to criticize the quality and substance of EIA conducted by other (substantive) departments of the Ministry of Environment. The Environmental Documentation Center for Impact Assessments was placed under the authority of the subordinated Slovak Environmental Agency, which annually reports its achievements, progress and activities directly to the Ministry of Environment. The creation of the Center enabled it to systematically archive all processes and impact statements, which in electronic form gradually became publicly accessible through the introduction of an electronic information system (www.enviroportal.sk). The public can access and comment on past and present environmen-

CASE STUDY 8 (Continued)

tal impact assessments conducted on all levels and institutions in the country.

Such a division enabled the EIA unit at the Ministry of Environment to focus on more strategic, methodological and control functions (expertise) vis-à-vis state environmental offices (regional and state) and municipalities. The Documentation Center is more focused on record keeping, outreach activities and trainings/seminars delivery.

Activities

Conceptual and Strategic: Preparation and implementation of national EIA legislation by the EIA unit: EIA and SEA, concepts, statements and suggestions towards EU and Slovak Government.

Capacity Building: Seminars, meetings, specialists, experts at all levels, workshops, experts meetings and publications (manuals, leaflets, video) where environmental impact assessment procedures were explained.

Methodology: The unit was developed by EIA staff in cooperation with external twining experts. The EIA unit covered all Environmental Impact Assessment Directives, and training. It was extremely important to adapt requirements to local conditions and work on enforcement.

Results

- Introduction of a two-stage environmental impact assessment process: (a) initial screening (b) conducting of EIAs.
- Comprehensive Law on Environmental Impact Assessment for both draft legislation and projects/activities
- Creation of the Documentation Centre, which stores all records from the process of environmental impact assessments.
- Creation of an electronic information system that enables the general public to have access to impact assessments.
- Increased capacity to conduct environmental impact assessments on all levels, including

- municipalities (the trainings started before the transfer of competencies): publication of manuals, leaflets and video documents on environmental impact assessments.
- Increased awareness on environmental impact assessments: outreach activities to municipalities, state offices, schools, investors.

Drivers

- Espoo Convention (initial driver for setting up the EIA unit and preparation of first Law on Environmental Impact Assessment)
- EU pressure on enforcement and quality of environmental impact assessment at both national (draft legislation) and local/regional (projects and activities) levels.
- Political support from the minister and state secretary.

Success Factors

- Institutional anchoring of the EIA unit within the Ministry, above the substantive departments, and directly under the state secretary during the pre-accession years.
- The EIA process reflected the capacities at the time by introducing the 2-stage process.
- The twinning project resulted in an increase in both financial and human resources: technical equipment for the electronic information system and expertise (trainings) on the conducting of EIAs.
- Competent local team as well as committed and excellent experts from Old Member States
- Strong ministerial support and acceptance (particularly after 1998 elections).
- Close cooperation at all levels of environmental management, particularly between the Ministry and Slovak Environmental Agency.

Lessons Learned and Recommendations

 Due to the lack of a quality control mandate vis-à-vis other ministries, the unit could not exercise its power beyond the Ministry itself.

CASE STUDY 8 (Continued)

- Unfortunately, the enforcement power of EIA unit vis-à-vis other ministries is limited.
- Conducting of EIAs. Environmental impact assessments were more successful with concrete projects on local (state and municipal) level than SEIA related to drafting legislation at the national level.
- It is very important to create a unit (EIA)
 whose only mission is to introduce and implement critical environmental tools, in this case,
 environmental impact assessments.
- It is very important to provide the unit with both symbolic and actual power for implementation within the Ministry (in this case to shift the unit above the substantive departments) and among the ministries and other agencies (in this case the unit was not given the power of quality control across ministries, which was reflected in the poor quality of EIA statements from other ministries).
- It is very important to link the efforts with other institutional reforms (in this case delegation of responsibility for the Documentation Centre to a subordinated Slovak Environmental Agency to streamline responsibilities and increase efficiency). It was not linked to the Legislative Process reform (and should have been), thus no sanctions exist for not including environmental impact statements (even when conducted) into governmental sessions reviewing draft legislation.
- It is very important to link the efforts with EU funds and programs to increase technical and human capacity for the implementation.
- It is very important to prepare outreach activities to all stakeholders, including the public, to increase awareness and demand for high quality EIA.



Examples of CEE Countries With No Specified EPA for Regulatory Functions

Regulatory Bodies	Enforcement Bodies	Reporting Structure	Observations
Estonia Ministry headquarters in Tallinn and 15 County Environmental Departments (Services); subordinated to the Ministry of Environment	Environmental Inspectorate; part of the Ministry of Environment; headquarters in Tallinn and 7 departments, each of them covering 2 or 3 counties	Reporting linked between environment bodies at all levels.	Not called EPA, but linked reporting structures, consolidated media, and separated regulatory functions make it very similar.
Hungary These institutions act independently from the Ministry of Environment and Water, but are under the Ministry supervision: National Environment, Nature Conservation and Water Management Chief Directorate; coordinates 12 Regional Environmental and Water Management Directorates 10 National Park Directorates (management issues) "Green Authority"—National and Regional Inspectorate for Environment, Nature and Water is responsible for permitting, which is mostly done at the regional level (EIA, part of IPPC, water, non-municipal waste)	Permitting, enforcement, and monitoring are the responsibility of the "Green Authority"—National and Regional Inspectorate for Environment, Nature and Water National Environment and Water Chief Inspectorate coordinates 12 Regional Environmental Inspectorates and 12 Regional Water Management Inspectorates	Reporting linked between environment bodies at all levels.	Regulatory and enforcement functions not clearly separated. Environmental media not consolidated (water and nature separated from others). Focus group discussions noted the possibility of creating a separated EPA is still being considered.
			(Continued)

into sewage systems, that belong to the state owned companies.

Regulatory Bodies	Enforcement Bodies	Reporting Structure	Observations
 Czech Republic 14 Regional authorities issue the majority of air, waste, IPPC, and complex wastewater permits 77 County authorities issue local air, water and wastewater permits Czech Environmental Information Agency (CENIA) provides information services, professional support to State Administration in the area of IPPC, EIA/SEA, and integrated pollution register, and develops environmental policy tools Agency of Integrated Prevention (AIP) (expert support to Regional Authorities and Ministry of Environment in the permitting process and information source of BAT); a specialized section of the CENIA Waste Management Center (CEHO); a department in the Water Research Institute, established by the Ministry of Environment 	Czech Environmental Inspectorate (CEI); subordinated to the Ministry of Environ- ment; headquarters in Prague and 10 regional inspectorates	Mixed between bodies linked to other environment institutions and bodies embedded in governance structures.	Regional authorities are independent from Ministry of Environment unless specified relation is established in the legislation (e.g. requirement to involve Ministry of Environment or CEI in the permitting procedure as a stakeholder).
 Poland The Voivode Commission of Nature Conservation advises on nature conservation at regional level. Self-governments in Voivodships (administrative regions) are Marshal Offices and they also have environmental management responsibilities. Poviats (373) are responsible for implementation of environmental policy at county level, including permits and inspection. Gminas (2489) are responsible for implementation of decisions taken at higher levels and have direct responsibility for waste management. Gminas regulate and control the quality of industrial discharges 	Chief Inspectorate of Environment Protection; supervised by the Ministry of Environment Voivodship Inspectorates of Environmental Protection belong to Voivod (central administration at the regional level). Poviats are responsible for inspection at county level.	Environmental bodies are predominantly linked to governance structures rather than inter-linked among environment institutions.	Institute of Environmental Protection has selective roles related to functions usually granted to EPAs. Institute is a focal point for international conventions, is in charge of reference laboratories, etc. Focus group discussions noted a separated EPA was discussed and rejected earlier, however dissatisfaction with the current system has kept this open to reconsideration for the future.



List of University and Post Graduate Programs for Environment Available At SEE Universities

Albania

- Masters degree in **Environmental management** recently available at Tirana University
- Most additional qualifications acquired abroad, usually with international funding support

FYR Macedonia

- Masters degree in **Environmental management** available at University of Tetovo (Institute of Living Environment and Health)
- Masters degree in Ecology available at the Ss. Cyril and Methodius University of Skopje (Faculty of Science, Institute of Biology)

Croatia

- University of Zagreb:
 - Interdisciplinary Study Program in Environmental management (GEMS) (Masters and Doctoral degree); started 2004/2005; organized under the auspices of the University of Zagreb, Institute "Ruder Boskovic" (IRB) the Environmental Committee of the American Chamber of Commerce in Croatia and the Ministry of Environmental Protection, Physical Planning and Construction. GEMS Program is taught in Centre for Advanced Academic Studies (CAAS) of the University of Zagreb in Dubrovnik.
 - Faculty of Science: Masters degree in Environmental Science, Masters degree in Ecology and Nature Protection, and Doctoral degree in Ecology, Nature and Environment Protection
 - Faculty of Chemical Engineering and Technology: Masters degree in Environmental Engineering and Postgraduate University Interdisciplinary

Study—Specialist and Doctoral degree in **Environmental Engineering**

- Faculty of Forestry—Masters degree in **Urban** Forestry, **Protection of Nature and Environment**
- University of Osijek:
 - Postgraduate University Interdisciplinary Scientific Study—Masters degree in Nature and Environmental Protection—started 2001; joint study of the University of Osijek and Institute "Ruder Boskovic"
- University of Rijeka:
 - Technical Faculty: Doctoral degree in Environmental Engineering and Environmental
 Protection; joint studies of the University of Rijeka and Institute "Ruder Boskovic" in the area of science and environmental protection
- University of Split:
 - Faculty of Natural Sciences, Mathematics and Education—Bachelor degree in Science and Technology of the Environment and Territory—
 3-year course, started in 2001/2002; E-learning project; sponsored by the Ministry of Science, Education and Sports; Partners: University of Molise (Italy), University of Split (Croatia), Valahia University of Targoviste (Romania)

Bosnia and Herzegovina

- There is no comprehensive university program for environment
- Some faculties in BiH, like School of Technology Tuzla and School of Technology Banja Luka have programs related to environment but not interdisciplinary (Ecology and Working Environment and Environment at the Department of Geography)
- There is an initiative to start an interdisciplinary Environment Masters Program at the University of Sarajevo but it has not been established yet.

Serbia

- University of Belgrade:
 - Interdisciplinary Study Program (Multidisciplinary Graduate Studies) in Environmental Management (Masters and Doctoral degree)
 - Faculty of Biology: Bachelor degree in Ecology and Environmental Protection; Doctoral degree in Ecology, Biogeography, and Biodiversity Protection
- University of Novi Sad:
 - Interdisciplinary Study Program (Association of Centers for Interdisciplinary and Multidisciplinary Studies and Development Research (ACIMSI))—University Center for Environmental Engineering (Specialist, Masters, and Doctoral degree); four programs: Water protection, Air protection, Protection of the civil engineering heritage, and Management of solid waste
 - Faculty of Science: Bachelor degree in Ecology-Environmental Protection

- University of Kragujevac (Faculty of Science):
 Bachelor degree in Ecology; Masters degree in Environmental Protection
- University of Nis (Faculty of Science): Bachelor degree in **Ecology**

Montenegro

- University of Montenegro:
 - Faculty of Science: Bachelor degree in Ecology;
 Masters degree in Ecology and environmental protection and Masters degree in Biodiversity
 - Faculty of Technology and Metallurgy: Bachelor degree in Environmental Protection degree; Graduate degree in Environmental Chemical Technology

Territory of Kosovo

 University of Pristina (Faculty of Science, Biology Department) offers a degree in Ecology



Eurostat Definition of Environmental Protection Expenditure (EPE)¹

Environmental Protection Expenditure (EPE)

EPE is the money spent on all purposeful activities directly aimed at the prevention, reduction and elimination of pollution or any other degradation of the environment. The data on environmental protection expenditure presented here do not include:

- Activities that, while beneficial to the environment, primarily satisfy technical needs or health and safety requirements.
- Expenditure linked to mobilization of natural resources (e.g., water supply).
- Calculated cost items such as depreciation (consumption of fixed capital) or the cost of capital as this questionnaire only records actual outlays.
- Payments of interest, fines and penalties for noncompliance with environmental regulations or compensations to third parties etc., as they are not directly linked with an environmental protection activity.
- Activities such as energy and material saving are only included to the extent that they mainly aim at environmental protection. An important example is recycling which is included only to the extent that it constitutes a substitute for waste management.

Classification of Environmental **Protection Activities and Expenditure**

Environmental protection expenditure is classified in different environmental domains according to the environmental media or type of pollution/degradation concerned.

The following domain breakdown is used when collecting data on environmental protection expenditure:

- 1. Protection of ambient air and climate
- 2. Wastewater management (includes prevention of emission to surface water)
- Waste management (includes treatment of lowlevel radioactive waste, composting, street cleaning and sweeping, recycling)
- 4. Protection and remediation of soil, groundwater and surface water (includes all cleaning-up activities)
- 5. Noise and vibration abatement (excluding work-place protection)
- 6. Protection of biodiversity and landscape
- 7. Other: Sum of Protection against radiation (excluding external safety), Research and development, Other environmental protection activities

(Including general environmental administration and management, education, training and information, indivisible expenditure and expenditure not elsewhere classified).

Some countries can only provide more aggregated data, where some of the specific environmental domains are included in an extended category "other". Therefore, a more aggregate domain breakdown is used in the country comparisons in Chapter 2, where only the domains 1–3 are shown separately and all remaining domains are aggregated into the category 'Other.'

¹ (European Commission, Eurostat Publication, 2002 (KS-CM-02-001-EN-C), Environmental Protection Expenditure in accession countries).



Review of Environment Funds in CEE Countries

Post-Accession Management of EU Grants	No	No	No	Partially, Manages Operational program Infrastructure, Operational program Environment and Cohesion fund.
Fund Still in Operation?	No	Yes	Yes	Yes
Budget	Earmarked budget within the state budget.	Earmarked budget within the state budget.	A separate budget from national budget	Extra budgetary
Sources of Income	 60 percent from the pollution above the norms fees 70 percent from the penalties the fees for services of MoEW state budget target funds donations privatization fuel taxes other 	 fees state budget target funds interests from deposits donations penalties and sanctions for environmental law breaks incomes from activities of the enterprise other 	• "Debt-for-Environment" Swap Agreement between the Governments of Switzerland and Bulgaria	 Payment for the discharge of waste water into surface waters Fees for the discharge of harmful substances into the atmosphere Fees pursuant to the law on Waste disposal
Year of Establishment	1995, since 1997 within struc- tures of MoE. Closed in 2002.	2003	1995	1991
Name of Fund	National Environ- mental Protection Fund	Enterprise for Environment Protection Activities Management (EEPAM)	The National ECO Trust Fund (NTEF)	State Environ- mental Fund
Country	Bulgaria			Czech Republic

	Yes; implementing agency for the European Regional Development Fund's environmental measure and Cohesion Fund	No (Continued)
	Yes	No, closed in 2005 and integrated into the civil society support system
	EIC is as a separate budget line under the budget of Ministry of Finance	Off the national budget
 Fees pursuant to the law on Wrapping materials disposal Levies for the permanent or temporary non-agricultural use of soil Fees for the production and import of substances that are harmful to the Earth's ozone layer, penalties imposed by MoE and CEI Payment of loans 	 the assets transferred to the EIC upon establishment; annual transfers from the state budget; allocations from rural municipalities and cities budgets; loans (contracted by the Government); international organizations; grants; repayment of loans and related interest receipts; pollution charges and fines; water abstraction fees; mineral extraction charges; package excise, etc 	Environmental FeesEnvironmental Fines
	2000	2000
	Environmental Investments Centre (a legal successor of the Estonian Environ- mental Fund which was dissolved in June 1999)	Environmental Fund
	Estonia	Hungary

Post-Accession Management of EU Grants	No	o Z
Fund Still in Operation?	Yes	Y es
Budget	After 2004 a special budget line in National budget	Extra budgetary sources: inter- national investors, EU
Sources of Income	• natural resource tax (by 2004)	Contractual agreements on earmarked loan schemes for any applicant, mostly municipalities. Donors include: Nordic Environmental Finance Corporation (NEFCO) EU Phare contact unit (the Ministry of Finance) Danish Environmental Protection Agency (DEPA) Voited Nations Development Program German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety ERDF
Year of Establishment	changes, new entity in 2004	tered in 2004)
Name of Fund	Latvian Environ- mental Protection Fund (LEPF), transformed in to LEPF Administrati on in 2004	Environ- mental Investment Fund, State Capital Company
Country	Latvia	

			(Continued)
o Z	Yes	No	°Z
Yes	Yes	Yes	Yes
Within state budget	Extra budgetary	Extra budgetary	Extra budgetary
 Initially, it was supported by the EC and USA International Development Agency Phare capital grant Environmental Pollution Tax 	Environmental FeesEnvironmental Fines	Foreign depths from USA, France, Switzerland, Italy, Sweden (to be expired at the end of 2003), and Norway	various taxes paid by polluting economic agents, allocations from state budget, donations, sponsorships, financial assistance from various natural and institutional entities or international organizations, taxes for the issuance of environment authorization as well as the repayment of principal and interest by the users of the resources of the fund.
1996	1989	1992 as a foundation with mechanism "debt-forenvironment swap"	2000
Lithuanian Environment al Investment Fund (LEIF)	National Fund for Env. Protection and Water Management	EcoFund	National Environment al Fund (NEF)
Lithuania	Poland		Romania

Name of Fund E	Year of Establishment	Sources of Income	Budget	Fund Still in Operation?	Post-Accession Management of EU Grants
7	Cancelled in 2002, fire-established ir in 2005 as Environmental Fund	fines; fees; subsidies; grants; and interest on loans	extra budgetary	Yes	°N
1993		8.5% of public companies value that were successfully privatized. Other sources are loans granted by International Bank for Reconstruction and Development (IBRD), European Investment Bank (EIB) and EU Phare program	extra budgetary	Yes	°Z



Staff and Institutional Changes in Environmental Institutions in CEE Countries

Country	Most Important Changes	Negative Influencing Factors/Problems
Bulgaria	 Institutional changes No new environmental institutions after 2001 Both the MoEW and the Executive Environmental Agency (in 2000) had the same functions as well as adopting responsibility for approximation legislation and Directives. Staff changes Number of staff overall increased by 6% 51% of staff increases for specialized (environmental experts, not administrative support) administration Very little recruitment centrally 130 posts and 269 posts were created at the regional and Executive levels respectively. 	 Increase in staffing numbers reflected the changes in structure and funding sources
Czech Republic	 Institutional changes 2 new institutions created Staff changes Staff increase in 2000: 38 compared to planned 150 Staff increase in 2001: 66 compared to planned 152 Staff increase in 2002: 231 compared to planned 291 In the year 2002, 50 persons from the Ministry of Environment and 19 from the District Offices were transferred to the Regional Authorities At the initial stage before first screening MoE was using external consultants and only later MoE involved its own staff MoE employs nearly 800 personnel, directly responsible for environment are about 250 persons 	 In 2002 year Agency for Integrated Prevention and Waste Management Centre was established and hired nearly 60 new staff, so the increase at a central level was not so high. The staff cost was usually exaggerated by 10%, as Ministry of Finance had limited financial resources for planned staff numbers Influencing factors: EU requirements regarding the regional/administrative settings (a public administration re- form in 2001) and political factors Public administration reform caused lack of clarity in terms of division of re- sponsibilities and staff shifts—planning was difficult (Continued)

Country	Most Important Changes	Negative Influencing Factors/Problems
Czech Republic		 No single environmental agency—responsibilities are divided between AIP and WMC which perform dedicated regulatory functions, usually under responsibilities of environmental agency in other countries According to interviewees, at the moment regional authorities are understaffed
Estonia	 Institutional changes Important structural change in the environmental institutions in Estonia was carried out before 2000: environmental departments of County Governments were closed and 15 Environmental Services were created at the county level directly subordinated to the MoE Staff changes Almost all key departments of the Ministry employed new experts Investment Department was fully staffed (6 officers) in 2002 rural municipalities have very limited capacity (1–2 officials dealing with environmental issues) Additional staff for supervision over chemical substances and establishment of Natura 2000 network MoE has 500 employees: 200 within MoE and 300 in County Environmental Services 	 People have burned out during the intensive transposition period and left the ministry Staff retention is still a challenge to Estonian environmental institutions No environmental agency—regulatory responsibilities are divided between 15 County Environmental Departments (Services) their main tasks are to organize the implementation of government policies, programs and action plans on environment, nature protection, forest and fishery policy in the counties, and Environmental Inspectorate which coordinates and implements the control of usage of natural and environmental resources and applies obligations according to the law
Hungary	 Institutional changes No new environmental institutions created in the preaccession period—only reorganization of the ministry (creation of new departments) and merging of institutions took place In 2002, the former Ministry of Environment was enlarged with a water management branch transferred from the Ministry of Water Management and Transport (MoWT) 2005: Regional Environment, Water and Nature Protection Inspectorates established which combine Environmental Inspectorates and Water Management Inspectorates 	

improving coordination among units

(Continued)

Country **Most Important Changes Negative Influencing Factors/Problems** Hungary Staff changes • Legal inspection and authority func-• Staff was reduced step by step from 600 to 440 from tions have been separated from resource the end of 2002 until the beginning of 2004—as a management functions, however no aspart of government wide public administration resessment of this new system has been ductions. In the environmental field—staff of the done yet Ministry for Environment and Water was reduced/ Since they lost Management bodies structural changes in the ministry, better efficiency of (e.g. National Park Directorates) bethe department/and—the staff of the regional direccame much weaker and, not having torates and—the staff of the regional inspectorates authority functions, they are not any was reduced more able to efficiently stop damaging activities, while the new directorates • As a result of this: staff employed in the three main environmental institutions—Environmental are too slow and lack the necessary Inspectorate, Water Inspectorate and Nature local knowledge Conservation Directorate—is around 280 No environmental agency—Regional • 160 employees are distributed among several other Inspectorates for Environment, Nature departments and Water (12), Regional Directorates for Environment and Water (12) and the 10 National Park Directorates are the regional bodies responsible for the implementation of the EU environmental Acquis. The primary responsibility for enforcement of environmental legislation belongs to the Regional Inspectorates, which operate the main environmental monitoring network with equipped laboratories. Regional institutions, directorates and inspectorates are all under the supervision of the National Directorate for Environment, Nature and Water and the National Inspectorate for Environment, Nature and Water of the Ministry of Environment and Water Latvia Institutional changes Political will Environmental Institutions in Latvia have been adapted Learning by doing approach and merged and de-merged since the initiation of the Benefit of being a smaller country in Approximation process in 1997 this case, demonstrates that change can Established Strategic Co-ordination Department at be fairly rapid and fluid the MoE in 2003, which coordinated transposition ef-Main focus of institutional strengthenfort and housed the European Integration Bureau ing was through an increase in staff (EIB) responsible for the Accession process. working on environmental protection • Reduced senior level personnel and allocated more reissues sources at the local and implementation levels

Country	Most Important Changes	Negative Influencing Factors/Problems
Latvia	 Total number of administrative staff increased and 16 new units/departments were created mainly related to specific sectors and funds management In 2000 the Latvian Environmental Agency was established Establishment of the Investment Department at MoE was supported by increased capacity Staff changes A reduction in management personnel despite overall increase in staff numbers Problems retaining staff, in particular in response to institutional changes which meant a loss of staff at the junior levels (poor salaries) 	
Lithuania	 Institutional changes MoE has 8 regional environmental protection departments (REPD) and 17 subordinate institutions Number of REPD employees increased by 16 positions responsible for supervision of state forest management: 8 Territorial Forest Control Units (TFCU) at the Regional Environment Protection Departments (REPD) in 2002—16 officials 5 new units/departments created in 2004 including Environmental Protection Agency (EPA)—97 persons 9 Regional Waste Management Companies (RWMC)—5 employees per company Staff changes Currently 221 employees at MoE, 158 of which are directly responsible for environment Insignificant increase in 2004 at MoE: 24 persons 10–15 percent staff increase in the MoE and its subordinate institutions. 	caused confusion and uncertaintyamong technical staffInstitutional strengthening was imple-
Poland	 Institutional changes 3 new departments at MoE and 2 National Fund for Env. Protection were created (cohesion and structural funds) Staff changes The number of staff of the Ministry has increased on average by 25% during the EU accession period 	 Political appointments of heads of departments—loss of knowledge Administrative reform in 1999 driven by NUTS requirements—resulted in a certain dualism at regional level (self-governments vs regional authorities) High staff turnover No environmental agency

Country	Most Important Changes	Negative Influencing Factors/Problems
Poland	 At regional authorities (governmental structures and self-governments) level 5–10% increase related to other environmental regulatory functions (no inspection functions) Regional environmental protection inspectorates employ around 2000 staff, among them app. 600 inspectors 	
Romania	 Institutional changes 6 new institutions/departments were created including National Environmental Protection Agency and 8 regional divisions in 2003 New agency for nature protection being established in 2006 moving this function from agriculture to environment Staff changes In 2001: a significant cut (around 23%) was made in the number of civil servants in connection with Government restructuring political decision In 2001: Ministry of Water and Environmental Protection (MWEP) was merged with the Ministry of Agriculture, increasing the problem of severe understaffing. Separated again in 2004 Dramatic increase of financial efforts for new staff and equipment in 2005 Only in one year the staff employment expenditures doubled 	 Relatively low salaries that creates difficulty to attract competent staff Political changes Budget constraints The law on civil servants is not flexible enough and does not allow the proper management of staff and fast recruitment of staff for the high-ranked positions High staff turnover due to low salaries; Constraints in recruitment policies & excessive red tape (Civil Servants Employment Act) Budget constraints mean cut in staff numbers Political changes influence senior staff changes. There is a loss of technical skills and knowledge
Slovakia	 Institutional changes 1 new department (EU affairs) created at MoE EIA centre established 5 units in inspectorate, Nature State Conservancy, Hydrometeorology Institute—mainly related to implementation of IPPC and Natura 2000 Directives and project coordination units Staff changes A steady increase in the number of employees, Environmental Agency—number of employees is rising sharply in the last years due to the requirements related to the implementation of EU legislation Environmental inspectorate—in 2001–2005 the number of employees grew from 150 (in 2002) to almost 240 	Fund and a lower measure of environmental law enforcement Bad planning—Official quantitative assessments for number of staff have been elevated for the sake of pegotiations

Country	Most Important Changes	Negative Influencing Factors/Problems
Slovakia	 The majority of departments (apart from the SAŽP) in general, did not reach their staffing level limits, despite the need for increased capacity Local state administration independent Environmental Offices have been disbanded and the regional- and district-level environmental admini stration staff decreased by 32%. After 2003, the MoE hierarchical structure now contains Regional State Environmental Administration Offices (in all 8 regions) and District State Environmental Administration Offices (46 Offices governing the 79 districts of the Slovak Republic) 	
Slovenia	 Institutional changes 5 new institutions created (including Environmental Agency) In 2003–2004 Merge of energy sector with MoE and transfer back to the Ministry of Economy (in 2005). Staff changes Environmental agency in 2001 (413 staff) with slight staff increase: in 2006—450 staff Over the period of 2000–2004 the number of staff of MoE doubled with the highest increase in 2003–2004 The environmental staff increase in the period 2000–2004 is 213 persons and most of it was in the MoE 	• Interviewees believe that merging environment with energy issues improved the system and helped to manage Kyoto obligation and greenhouse gas (GHG) trading, as well as energy issues related to spatial planning. It became easier to solve some issues (construction permits for hydropower stations on Sava River, for example)



Survey Methodology

he institutional assessments of the experience of new member states are based on desk reviews, focus groups, a survey and in-depth semi-structured interviews. The ten country offices of the Regional Environmental Center (REC) conducted the research, using a common approach developed by the main REC office working with the support of a social research firm. The institutional assessment used one hundred in-depth interviews, nineteen focus groups and responses to survey by 382 staff of environmental institutions and other stakeholders in CEE states to identify lessons learned from their institutional reform process that can serve as guidance to current and future West Balkan pre-accession countries.

In each country, a desk review was used to establish a basic profile outlining the key dimensions of environmental institutions for each country. Following the desk review, focus groups were conducted in each country (total of 19) used to identify key issues and overall common themes. The focus groups also served as an input to survey design.

Semi-structured interviews were used to supplement the basic profile, expand the focus group findings, and serve as the instrument for developing the case studies. Issues arising in the focus groups were further explored in the semi-structured interviews. Interviews were also conducted in all the countries; encompassing between eight to twelve people per country.

A targeted survey was conducted in each country. REC country office staff identified participants for focus groups and possible survey respondents, based on local knowledge of key stakeholders. The targeted respondents were primarily staff of environmental institutions. Representatives of NGOs and businesses were also targeted, but they were requested to respond to

only questions most pertinent to their perspectives on the process. Within the limited pool of staff of environmental institutions working on EU accession issues, the survey responses can be considered as representative. Staff of REC country offices distributed the questionnaire by email and followed up with phone or face interviews as necessary.

Stakeholders were asked to identify key areas of institutional change, including enabling factors and obstacles faced in the process. Results of the focus groups were used to determine the key areas of institutional change and main obstacles. The survey questionnaire then incorporated questions on six key groups of directives and sought feedback from respondents on the relative difficulty of the various dimensions of institutional reform and the measures undertaken to support and implement the changes. Survey respondents were directed to sections of the questionnaire relating to their own areas of expertise and the issues, which they ranked as the most significant within their area. The questionnaire allowed space for open ended responses to better interpret responses. The over-arching objective of providing guidance to the West Balkans States as they embark on this process was made clear so that respondents could think about approaches which could be improved if they were to start the process over again.

Many participants from the 10 CEE states expressed a strong willingness to have West Balkan States learn from their experiences however also welcomed the review as an opportunity for their own internal self-reflections following a period of intense and rapid changes. In this context, the results of the survey are of a wider interest to not only West Balkan but also CEE states.

References

- Agriconsulting S.p.A., Functional Review of the Environmental Sector in Bosnia and Herzegovina, April 2005.
- Atle C. Christiansen et al., The Shadow of the Past: environmental issues and institutional learning in EU enlargement processes, Journal of Environmental Policy and Planning, Volume 4, Issue 1, pages 67-86, February 2002.
- B.E.R.C.E.N: Compiled Report on the Current Legal Structure and Resources Available to the Environmental Protection Agencies and Inspectorates in the Countries of South Eastern Europe, February 2002.
- Conference Report Preparing Southeast Europe for EU Accession, September 2005 held in Skopje, Macedonia.
- Croatian Cleaner Production Center, Background paper— Sustainable Consumption and Production & Education on Sustainable Development: Challenge for the 21 Century, 2005.
- ECENA Meeting country presentations, Albania, Bosnia and Herzegovina, Macedonia, Serbia, Kosovo.
- Danish Environmental Protection Agency, The Environmental Challenge of EU Enlargement in CEE, Thematic report, 2001.
- European Agency for Reconstruction, Technical Report on Functional Analysis and Institutional Development Plan for Macedonia, Project 112680D/SV/MK Strengthening the Capacity of the Ministry of Environment and Physical Planning, September 27, 2005.
- European Agency for Reconstruction, Strengthening the Capacity of the Ministry for Environmental and Physical Planning Technical Report on EIA and IPPS, 2004.
- European Commission, DG Environment, Administrative Capacity for Implementation and Enforcement of EU Policy in the 13 Candidate Countries, 2001.
- European Commission, DG Environment, Progress Monitoring Manual 2004.
- European Commission, 2003 Environmental Policy Review, Communication from the Commission to the Council and European Parliament, March, 2003.
- European Commission, Staff working document on the links between employment policies and environment policies, November, 2005.
- European Commission, Eurostat, Environmental protection expenditure in accession countries, 2002.
- EU web site, Accession Environment Chapter Questionnaires for Croatia and Macedonia.

- EU CARDS Program website, http://ec.europa.eu/comm/en-largement/cards/index_en.htm.
- European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL), Benchmarking on Quality Parameters for Environmental Inspectorates, IMPEL workshop in Copenhagen 8-9 September 2005.
- Government of the Republic of Croatia, Ministry of Environmental Protection, Physical Planning and Construction, Waste management Strategy for the Republic of Croatia, 2005.
- Government of the Republic of Croatia: Answers to the Questionnaire of the European Commission, 2003.
- Government of Macedonia, Answers to the Questionnaire of the European Commission, 2005.
- Government of Macedonia, Ministry of Environment and Physical Planning, National Waste Management Plan 2006-2012, 2005.
- Government of the Republic of Serbia, Ministry for Protection for Protection of Natural Resources and Environment, National Waste Management Strategy, 2003.
- Ministry of Environment and Spatial Planning &REC, Kosovo environmental Action Plan 2006-2010 (KEAP), 2006.
- International Atomic energy Agency (IAEA) website, R&D Focus, energy and Environment Data Reference Bank (EEDRB), http://www.iaea.org/inis/aws/eedrb/index.html.
- Independent Commission for Mines and Minerals website, http://www.kosovo-mining.org/

Kosovo Poverty Assessment, World Bank, 2005.

- Ralf Juelick, Regional Environmental Center, Progress in Environmental Law Drafting in south Eastern Europe, December 2005.
- Regional Environment Center, Environmental Snapshot of South Eastern Europe, RReP Country Profiles, March 2006.
- Regional Environmental Center, Developing a Priority Environmental Investment Program for South Eastern Europe, 2003.
- Regional Environment Center, Environmental Taxes in an Enlarged Europe.
- The European Commission, DG Environment, Implementation and Enforcement Capacities in Croatia for the Environmental Acquis, Final Report, May, 2005.
- The Joint Office of European Commission / World Bank for South East Europe website, http://www.seerecon.org/.
- United Nations Development Program, Capacity Assessment Practice Note.

- United Nations Development Program, Capacity Development Practice Note, April 2006.
- United Nations Economic Commission for Europe, Environmental performance Review—Albania, 2002.
- United Nations Economic Commission for Europe, Environmental performance Review—FYR Macedonia, 2002.
- United Nations Economic Commission for Europe, Environmental performance Review—Bosnia and Herzegovina, 2004.
- United Nations Economic Commission for Europe, Statistical Yearbook of the Economic Commission for Europe, 2005.
- United Nations Mission in Kosovo, New Kosovo Government 2002 Budget, 2001.
- World Bank, Country Assistance Strategy for the Former Yugoslav Republic of Macedonia, August 14, 2003.
- World Bank, Draft ECA MDG Study—Albania Section.

- World Bank, Environment at a Glance Pages, 2006.
- World Bank, Federal Republic of Yugoslavia Joint IDA-IMF Staff Assessment of the Interim Poverty Ruction Strategy Paper, July 23, 2002.
- World Bank, Serbia and Montenegro Country Environmental Analysis (CEA), 2003
- World Bank, Interim Strategy Note for Kosovo for the Period FY06-FY07, March 30, 2006.
- World Bank, Environmental Implications of Planned Development Policy Lending to Bosnia and Herzegovina; A Strategic Environmental Assessment, June 29, 2005.
- World Bank, EU-8 Administrative Capacity in New Member States: The Limits of Innovation?, September, 2006.
- World Bank, Public Expenditure Policies in South Eastern Europe, March 2006.
- World Bank, 2006 Little Green Data Book, April 2006.