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ENVIRONMENTAL FINANCING IN TRANSITION ECONOMIES

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Central and Eastern Europe (EAP Task Force)
Organisation for Economic Cooperation and Development

through the Ad Hoc Working Group of Senior Officials

BACKGROUND DOCUMENT



UNITED NATIONS
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EXECUTIVE SUMMARY

1. This paper summarises some of the main conclusions and recommendations arising from work on environmental finance issues prepared for the Kiev “Environment for Europe” Ministerial Conference. It focuses mainly on the experience in EU accession and EECCA countries and, where possible, on the situation in south-east Europe (SEE)¹. The paper analyses domestic environmental expenditures and international commitments; it does not examine financial mechanisms and flows related to global environmental mechanisms such as under the Climate Change Convention. As far as possible the paper is based on empirical information so as to provide a solid basis for Ministerial discussion.
2. Both the environmental targets and the financial means for achieving them vary widely among transition economies. In EU accession countries, the demand for environmental improvements is driven by the need to comply with the environmental requirements in EU environmental legislation. Substantial financial resources are being made available domestically, supplemented by pre-accession financial instruments. In addition, financial mechanisms in keeping with the Polluter-Pays Principle are emerging; increasingly, enterprises and municipalities are financing their own environmental investments and raising funds on local financial and capital markets.
3. Accession countries are already allocating a greater share of their national income for environmental expenditures than most EU member states, in some cases approaching affordability limits. However, a rough assessment that was made for this paper suggests that, with the exception of Poland and Hungary, the current levels of environmental investments in accession countries may not be sufficient to cover the official estimates of investment needs according to the schedules contained in transitional agreements. In so far as this is the case, it would require those countries to review their estimates of environmental investment needs, the realism of the transitional schedules, the cost-effectiveness of the approaches they are following to implement EU directives and/or to increase current environmental investment expenditures. Moreover, they will have to mobilise finance to cover operational and maintenance costs of environmental assets, which according to available studies are as high as annualised capital costs.
4. In the SEE region, EU membership is a more distant prospect and hence not such a strong driver of environmental improvements. The incentives to undertake environmental investments are often generated by foreign grants; the role of the Regional Reconstruction Programme is important in this regard. The need to develop environmental infrastructure to revive the tourist industry is also stimulating environmentally-related investments in some SEE countries.
5. The situation in EECCA countries is even more difficult. There is no equivalent driver of environmental improvement as in accession or SEE countries. Most environmental investments involve a state subsidy and much remains to be done to implement the Polluter- and User-Pays Principles. To achieve even the modest target of operating and maintaining the existing low level of services of water and waste water infrastructure would require some EECCA countries to double or treble their current levels of environmentally-related expenditure in these sectors. Achieving the Millennium Development Goals would cost even more. However the levels of environmentally-related expenditure in some EECCA countries (e.g. Moldova, Kazakhstan, Ukraine), as a share of national income, seem already comparable with the high-spending accession countries, though absolute levels are very low. This suggests that, at least for some EECCA countries, it is not always the willingness but sometimes the ability to pay, linked to low

¹ *EECCA*: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine, Uzbekistan

EU Accession countries: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia

SEE: Albania, Bosnia and Herzegovina, Croatia, FYR Macedonia, Serbia and Montenegro

income, that is the main obstacle to higher levels of domestic environmentally-related expenditure. There is however a group of EECCA countries where environment has been very low in national expenditure priorities. More robust empirical expenditure data, based on OECD/Eurostat standards, would allow these tentative findings to be assessed more rigorously.

6. In EECCA countries only one quarter of environmental expenditure is for capital investments, while recurrent expenditure accounts for the remaining three-quarters. In EU accession countries capital investments amount to more than a half of total environmentally-related expenditures, reflecting an effort to implement the investment-heavy EU environmental directives. In general more attention should be paid to the ways of financing recurrent expenditures.

7. Much less information is available in all countries on the sources of financing environmentally-related expenditures. Available evidence suggests that domestic rather than external sources represent the greatest share of environmental expenditures in accession, SEE and EECCA countries; the exceptions are some of the smaller countries such as, the Baltic states, the Kyrgyz Republic, Armenia and Georgia.

8. The role of environmental funds continues to be important in some accession countries but is mostly marginal in EECCA (with the largest potential in Moldova and Ukraine) and in SEE countries. The financial sector is an increasing source of finance for environmentally-related investments in accession countries, although some policy and institutional obstacles exist, including some possible crowding out by state aid. In EECCA countries, private finance plays little if any role in environmentally-related investments indicating poor access to, and low demand for, debt finance in the environmental sector. More information on the financing of utilities and the contribution of user charges is needed.

9. Bilateral assistance increased to both accession and EECCA countries during 1996-2001. For accession countries, the growth was closely related to the European Commission's pre-accession financing instruments, which have more than off-set diminishing bilateral assistance. The Commission was the largest donor by a substantial margin. Other EU member states, mainly Denmark and the Netherlands, also provided support, and the US and Japan featured in the group of largest donors. For EECCA countries, EC/TACIS was the largest donor, closely followed by the US. Other EU member states (mainly Denmark, Germany, UK and Sweden) also made substantial contributions, as well as Norway, Switzerland and Canada.

10. The increased commitments of international environmental assistance to EECCA countries, including through the PPC, provides evidence that some refocusing of effort on to the needs of this region has occurred since the Aarhus Ministerial meeting. However, it seems likely that additional support from donors would be needed if even modest objectives are to be achieved. There may be some scope for this in that the environmental share of total assistance to EECCA countries is smaller than in other regions. However, EECCA countries would need to assign a higher priority to environment within their cooperation programmes with donors for this to occur. An increased impact of international assistance may also be achieved by exploring opportunities to leverage domestic environmental expenditures more effectively. The Millennium Development Goals and targets agreed at the WSSD provide an important new focus for intensified efforts in EECCA country-donor cooperation. However, a sharp increase in assistance may pose an absorption challenge in some countries.

11. IFI loans to EECCA and accession countries show a greater variation than donor assistance. This may reflect fewer but larger projects and the reduction of IFI activities in accession countries. In the EECCA region, the Russian financial crisis in 1998 may have had some negative impact, but, given the very low overall volume of lending, the time trends are very sensitive to IFI programming and project development cycles.

12. Overall, assistance flows - absolutely, per capita and as a share of GDP - to EECCA countries are much less than to the accession and SEE countries.

13. Finance is one instrument for achieving environmental goals and it must be applied in conjunction with policy and institutional reforms and capacity building if resources are not to be wasted and objectives achieved. In this light, the paper identifies areas where further efforts are needed:

- Strengthening the policy and institutional framework. EECCA and SEE countries should design environmental policies so that they: provide a more credible and stable framework for investment planning; provide clearer incentives for undertaking environmental investments; and redefine relations between environmental authorities and the main stakeholders: enterprises, municipalities and utilities. For accession countries the main policy challenge is to ensure that implementation of EU environmental directives is as efficient as possible taking into account benefits and costs.
- Strengthening municipal finance and financial sustainability of environmentally-related utilities. Accession countries have made significant progress in sound decentralisation of municipal services, in strengthening fiscal position and investment capacity of local governments, and in transforming utilities into efficient, financially viable, autonomous, commercially run entities. EECCA and SEE countries could build upon these lessons of successful transition and work with donors and IFIs, e.g. within the framework of the EAP Task Force and the PPC, towards accelerated institutional reform of the municipal environmental utility sector.
- Improving the data and information base: strengthening the collection of environmental expenditure data. Accession countries have redesigned environmental expenditure data collection systems in line with OECD/Eurostat standards, although better data on sources of financing is needed. SEE and EECCA countries need to follow this experience in order to establish a better basis for designing more financially realistic environmental policies and strategies.
- Making better use of existing resources in the public sector by elaborating more results-oriented, realistic implementation plans and financing strategies using for example the FEASIBLE model; improving governance and applying “good international practices” in public environmental expenditure programmes and institutions.
- Mobilising additional resources and diversifying finance sources by removing environmentally perverse subsidies; reforming existing environmental and user charge systems; introducing new payments for environmental goods and services where warranted; facilitating access to local capital and financial markets; developing Public-Private Partnerships; facilitating innovative financial products tailored at environmental projects, developing new targeted multi-stakeholder partnerships, such as the Banking, Business and Biodiversity in Europe Initiative.
- Strengthening international partnerships (by donors and EECCA countries assigning an efficient level of priority to environment in cooperation programmes; improving synergies between domestic and foreign finance, strengthening capacity for strategy development, investment planning, and project identification, preparation and implementation; and developing new forms of cooperation such as debt for environment swaps)

1. BACKGROUND

14. Environmental finance has been an important and constant item on the “Environment for Europe” agenda since the process was launched². The Environmental Action Programme (EAP) for Central and Eastern Europe that was endorsed by Ministers at their 1993 Conference in Lucerne called for an appropriate mix of policy, institutional and investment actions to address environmental problems in the most effective and efficient way. Since then, the two bodies established by Ministers to facilitate implementation of the Environmental Action Programme have worked toward this goal: the EAP Task Force by strengthening the ways in which transition economies mobilise financial resources and the efficiency with which they use them; and the PPC by promoting cooperation between donors and International Financial Institutions to accelerate environmental investments.

15. Environmental finance issues have also been examined in the context of environmental performance reviews. One of the conclusions of “Environmental Policy in Transition: Lessons Learned From Ten Years of UNECE Environmental Performance Reviews” is that the second round of reviews should put more emphasis on environmental finance issues.

16. This paper builds on earlier work as well as activities implemented since the Aarhus Ministerial Conference. It was prepared by the OECD Secretariat of the EAP Task Force with inputs from the World Bank, the EBRD Secretariat of the PPC, and the Regional Environmental Centre (Szentendre) Secretariat of the EAP Task Force for CEE and the European Centre for Nature Conservation. It also takes account of experience gained in financing environmental improvements in the context of EU accession and in The Regional Environmental Reconstruction Programme (REReP) for South-East Europe, which is unique partnership between the donors’ community devoted to environmental reconstruction in the SEE countries. In view of the increasing diversity among transition economies, the paper focuses on the extremes: the more advanced EU accession countries and the countries of Eastern Europe, Caucasus and Central Asia. Reference is also made to the situation in south-east European countries.

17. The paper aims to synthesise the main findings and recommendations from several reports prepared for the Kiev Conference that deal with this issue, and thereby to support a discussion at the Ministerial Conference. In particular the paper examines measures that could be taken :

- To allocate existing public financial resources for environment more efficiently, and
- To mobilise additional private and public resources to finance the environmental dimension of sustainable development.

² See “Environment in the Transition to a Market Economy: Progress in Central and Eastern Europe and the New Independent States”, OECD (1999), Chapter 6.

Main Reports Addressing Environmental Finance Issues

- “Trends in Environmental Expenditure and International Commitments for the Environment in Eastern Europe, Caucasus and Central Asia, 1996-2001” OECD/EAP Task Force
- “Mechanisms for Mobilising and Allocating Financial Resources to Achieve Environmental Objectives, including Debt for Environment Swaps: a Background Paper Prepared for the East/West Environmental Partnership; EECCA Environmental Strategy” OECD/EAP Task Force
- “Debt Swap for Environment and Development in Georgia: Pre-feasibility study, institutional options” OECD/EAP Task Force
- “Multi-year Investment Plan for Municipal Infrastructure: Pilot Project in Lutsk, Ukraine” OECD/EAP Task Force
- “Environmental Financing in Central and Eastern Europe: 1996-2001” REC (Szentendre)/EAP Task Force
- “PPC Report to Kiev Ministerial Meeting” PPC
- “Environmental Policy in Transition: Lessons Learned From Ten Years of UNECE Environmental Performance Reviews” UN/ECE
- “European Biodiversity Resourcing Initiative” ECNC/Swiss Agency for Environment, Forests and Landscapes/Joint Secretariats of PEBLDS

2. FINANCIAL NEEDS TO ACHIEVE ENVIRONMENTAL OBJECTIVES

2.1. Environmental Challenges in EU Accession, EECCA and SEE Countries

18. Both the environmental targets and the financial means for achieving them vary widely among transition countries. All countries face substantial environmental challenges, though the nature of those challenges is different. For accession countries these challenges are linked to complying with the demanding requirements of EU environmental legislation; for EECCA countries, major expenditures, in some cases (e.g. Moldova and Kazakhstan) involving a comparable share of national income with accession countries, will be required to achieve much more modest objectives, such as properly operating and maintaining of existing infrastructure or achieving the Millennium Development Goals.

19. The SEE countries, in the second half of 1990s, have struggled with the legacy of the break-up of the former Yugoslavia and numerous armed conflicts. Today the region is highly fragmented and characterised by a complex political, economic and social situation with a large number of refugees and displaced persons. Through the Stability Pact for South Eastern Europe³, a process of stabilisation has been initiated, offering prospects of future membership of the EU. From this perspective, sustained investment will be needed in environmental infrastructure. Financial support provided through the Stability Pact, particularly through the Regional Environmental Reconstruction Programme, and prospects of EU integration are important drivers for environmental improvements. For some countries of the region, an additional driving force may be environmental infrastructure needs associated with the reviving tourist industry.

20. The matrix below contrasts some of the main elements of the environmental finance challenge facing EU accession, the EECCA and the SEE countries. Obviously the presentation is highly simplified and does not address the important differences within these groups. Nevertheless, it provides a perspective on some of the different challenges facing the three groups of countries.

21. On the demand side, the matrix shows how the level of economic development and the structure of incentives for environmental investments are quite different. Accession countries have a much greater ability to pay and, stimulated by the enlargement process, a large willingness to pay.

22. On the supply side, enterprises and municipalities in accession countries are much more able than their counterparts in EECCA countries to use their own resources, or to access finance from public budgets or financial markets, for environmentally-related investments.

³ Stability Pact for SEE is the EU initiative aiming at strengthening the countries of the region “in their efforts to foster peace, democracy, respect for human rights and economic prosperity in order to achieve regional stability”- Stability Pact 1999. Bulgaria and Romania are also members of this initiative.

Table 1. Some Key Differences in the Environmental Challenge Facing EECCA, EU Accession and SEE Countries

	EU Accession Countries	EECCA Countries	SEE Countries
Environmental policy incentives for domestic polluters to abate pollution/use resources efficiently	Clear environmental policy framework and enforcement; predictable objectives; substantial financial incentives available to leverage additional investments; strong environmental requirements in trade partner markets;	Weak policy framework, subject to frequent change; inconsistent and “negotiable” enforcement; Low willingness to protect environment without subsidies; Low availability of financial incentives; limited trade related incentives.	Policy framework under development with the aim of EU harmonisation. Weak enforcement; most environmental investments financed by donors.
Market- based incentives	Substantial progress in market liberalisation; hard budget constraints on enterprises and increasing cost recovery for municipal services; though substantial perverse subsidies in some environmentally-sensitive sectors	Weak or non-existent market-based incentives: liberalisation of some markets; but widespread protection of, and subsidies for, enterprises; prices of municipal services substantially below cost recovery levels	Weak or non-existent market-based incentives. Prices of municipal services substantially below cost recovery levels
Ability to pay for environmental improvements (GDP per capita, US\$ per person, at current prices, as of the latest available year according to IMF database)*	Range: Romania (2 089 US\$ per person) - Slovenia (11 631.4 US\$ per person)	Range: Tajikistan (221.5 US\$ per person) - Russian Federation (2 700 US\$ per person)	Range: Croatia (4 597 US\$ per person) – Bosnia & Herzegovina (1 112.1 US\$ per person)
Investment climate	Increasingly large flow of foreign investment	Negligible foreign investment flows outside the natural resources extraction sectors	Low stock but increasing flow of foreign investment
Liquidity of enterprises (ability to finance investments)	Generally stable with exceptions in some sectors	Generally unstable with exceptions in some sectors	Generally unstable with exceptions in some sectors
Investment capacity and financial viability of utilities	Utilities generally autonomous, accumulate financial surpluses and have access to finance	Utilities subject to political interference, and unable to raise or access finance	Utilities subject to political interference and unable to raise or access finance
Financial markets	Loans at relatively low interest rate; medium to long maturities; range of financial instruments; solid capital base	Collapse following the Russian financial crisis of 1998; recovering from low level; Credit rationing common	Recovering from low level after the armed conflicts.
Public budgets	Solid and predictable revenue base; established system of public finance; fiscal discipline; sound supervision of sub-sovereign	Narrow revenue base(often based on natural resource exploitation); low levels of transparency, accountability and cost-effectiveness in public finances;	Narrow revenue base; budget is spent mainly on salaries and administration;

	borrowing; strong system of finance	autonomous, municipal	weak fiscal discipline; unclear inter-governmental relations; weak investment and investment planning	weak investment and planning
Priority of environment in public sector spending	High: driven by accession requirements	EU	Low: competing with other pressing policy sectors e.g. health, pensions etc.	Low: competing with other pressing policy sectors e.g. health, pensions etc.

* Source: IMF, The World Economic Outlook Database, September 2002

2.2. Costs of Achieving Environmental Goals in EU Accession and EECCA Countries

23. For countries acceding to the EU, environmental targets are defined in some 460 pieces of legislation. Of these, about ten involve heavy public investments in public infrastructure and a few more require major investments by the private sector. Accession countries have been able to negotiate transition periods for compliance with selected directives. Most of them expire in the years 2007—2008, but some stretch until 2015.

24. Table 2 compares the official estimates of total capital needs for environmental investments in each accession country with the official data of that country's current level of capital expenditure on the environment in the latest available year. It then contrasts the time that would be required to cover these estimated investment needs (if current levels of expenditure remain unchanged) with the longest transition period agreed for any individual directive. This rough assessment indicates the magnitude of the challenge facing all accession countries. With the exception of Poland and Hungary, the current levels of environmental investments in accession countries may not be sufficient to cover the official estimates of investment needs according to the schedules contained in transitional agreements. The challenge may even be underestimated, as most transitional periods are much shorter. Facing this challenge is likely to involve a combination of four actions: (i) revision and update of the official cost estimates to make them more realistic; (ii) revision of the implementation programs to achieve environmental objectives in more cost-effective ways; (iii) adjustment of transitional periods; and (iv) increasing the present levels of environmental capital expenditure.

Table 2. Estimated Environmental Investment Needs and Expenditures in EU Accession Countries

Country	Official estimates of total capital investment needs for full compliance [million Euro]	Minimum average investment expenditure needs per year [million Euro]	Actual environmental investment expenditures in 2000/1 [million Euro]	Time that would be needed to comply with total investment needs with 2000 expenditure level	Maximum length of transition period	Prospects for financing official investment needs within agreed transitional periods
Bulgaria	8,610	n.a.[344].	90	2096	na.	☹
Czech Rep.	6,600-9,400	660 – 940	559	2012-2017	2010	☹
Estonia	4,406	339	46	2096	2013	☹
Hungary	4,118-10,000	275-667	475	2009-2021	2015	☺-☹
Latvia	1,480 2,360	99-157	11	2135-2215	2015	☹
Lithuania	1,600	178	53	2030	2009	☹
Poland	22,100-42,800	1,473–2,853	1539	2014 – 2028	2015	☺-☹
Romania	22,000	n.a.[880]	180	2122	na.	☺
Slovakia	4,809	321	82	2059	2015	☹
Slovenia	2,430	162	97	2025	2015	☹
Total	79,260-110,001	7,810-9,430	3,132			☹

Notes: The Regional Environmental Centre for CEE developed an earlier version of this analysis. Data are for the latest available, comparable year. Prices are in Euros from different years, usually between 1997-2000;

Source: European Commission, Communication from the Commission The Challenge of Environmental Financing in the Candidate Countries, COM(2001)304 final (2001); Eurostat, Environmental protection expenditure in accession countries (2002)

25. Table 3 shows that the challenge of financing recurrent environmental expenditures is almost as large as annual capital investment expenditures. For example according to the World Bank estimates, the operation and maintenance costs for environmentally-related facilities in Bulgaria could amount to 2.2%-3.1% of GDP in 2015. This suggests that difficult choices may have to be made between using scarce public funds to operate and maintain existing infrastructure or expanding existing networks.

Table 3. Operational and Maintenance Expenditure Needs and Annual Costs in EU Accession Countries

	O&M expenditure needs	Annualised capital cost	Total annual cost in the year of full compliance (O&M + capital)	O&M share in total annual cost in the year of full compliance	Total annual cost as a % of GDP
Bulgaria [Mln Euro in 1998 prices]	577 - 749	645 - 942	1,222 – 1,691	44% -47%	4.9% - 6.7%
Czech Republic [Mln Euro, in 1999 prices]	478 - 782	671 – 903*	1,149 –1,685	42%-46%	2.5%-3.7%
Poland [\$bln in 1999 prices]	1.8 – 4.7	3-5.7	4.8 –10.5	38%-45%	1.7% - 3.7%

Source: OECD after the World Bank estimates

26. Estimating the costs of complying with environmental requirements in EECCA countries is more difficult. Frequently there are no specific objectives or targets, or there are too many that are overly ambitious and unrealistic. In the absence of clear targets, surrogates have to be used to gain insights into the level of investment that may be required.

27. One study in the Ukraine estimated the annual cost (annualised capital cost and operation and maintenance costs) in 2010 of complying with just one EU environmental directive – on Large Combustion Plants – at €320million, an equivalent to almost a half of the total of environmentally-related expenditure in Ukraine in 2001 (Berbeka, Jantzen, Peszko, 1999).

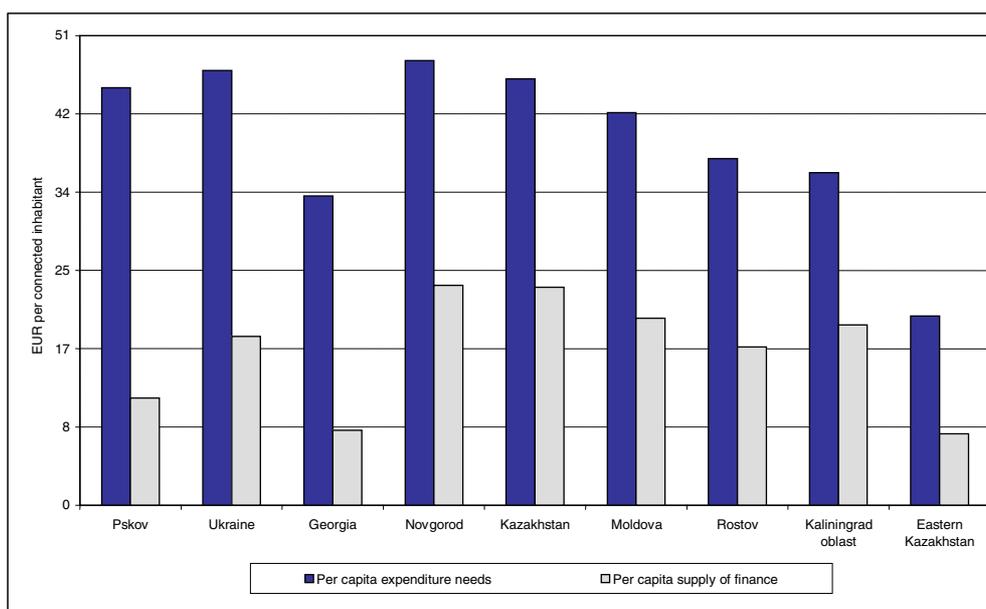
28. Another approach has been to estimate the expenditure needs if alternative targets of development of urban water and solid waste infrastructure were to be achieved (Environmental Financing Strategies, 1999-2003). These studies have shown that achieving even the modest objective of just operating and maintaining the current (low) levels of services of urban water supply and sanitation infrastructure could involve significant cost burdens in EECCA countries. Thus, Moldova would need to spend 3.2% of current GDP, Georgia 3.0% and Kazakhstan 1.2% per year to simply operate and repair currently functioning urban water and wastewater infrastructure facilities. This would imply doubling or tripling the current levels of expenditure to the water sector. The Danish authorities are currently using this approach to estimate the costs of achieving the Millennium Development Goals, including the target on sanitation agreed at Johannesburg.

29. The size of this challenge for EECCA countries is huge given that these needed levels of expenditure would most likely exceed in relative terms those in most accession countries. For example the total cost burden to comply with the entire body of EU legislation in the Czech Republic and Poland has been estimated at 1.7-3.7% of 2015 GDP, and it includes large scale investments in all major environmental directives, while the estimates of the EECCA cost burden are limited to maintaining urban water and wastewater infrastructure. The situation in Bulgaria may be closer to that in EECCA, as the burden of total

annual costs of EU accession in environment may reach a peak of 6.7 % of forecasted GDP in certain years. Thus even achieving very modest objectives, with hardly any new investments in infrastructure development will require substantial increase of expenditures by EECCA countries and lower income accession countries and place a significant burden on the economy.

30. The major problem is that the infrastructure in EECCA, although extensive even by OECD standards, has often been inefficiently designed and is very costly to operate and maintain. Energy costs are especially high, often accounting for up to 60% of total running costs of utilities, compared to 20%-30% in OECD countries. Cities in EECCA countries react to high operating costs by not operating the infrastructure or operating it unevenly. Water and wastewater services are often unreliable with frequent interruptions and low quality. In many cities, water is supplied for only a few hours a day, and it is insufficiently treated. Most wastewater treatment plants are by-passed or provide only basic mechanical, if any treatment at all. The most serious consequences are caused by the chronic shortage of funds for proper maintenance of infrastructure, such as replacement of worn-out parts, and essential rehabilitation. This results in a focus on ad-hoc breakdown maintenance (vs. preventive maintenance), and subsequently leads to the rapid loss of the economic and technical value of assets and eventually physical collapse of the entire infrastructure systems.

Figure 1: Expenditure Needs to Operate and Maintain the Present Level of Service vs. Supply of Finance per Inhabitant Connected to Water Infrastructure in the First Year of the Baseline Scenario



Source: DANCEE/OECD EAP TF, Financing Strategies for Water and Environmental Infrastructure (2003). Calculations made by COWI using FEASIBLE model, except Kaliningrad oblast for which project-based calculations are presented

31. For the SEE countries little if any reliable estimates of the environmental investment needs are available. The needs are also difficult to specify, because of a general lack of clear priorities, targets and objectives in national policies.

32. All countries face the challenge of finding more cost-effective investment programs. This will require least-cost planning of infrastructure development in river basins, focused on achieving critical ambient water quality targets. Economic instruments could play a supplementary role for certain policy objectives in order to cut overall compliance costs even further. For EECCA countries overly ambitious plans of extension of coverage and level of infrastructure services need to be replaced by realistic capital

investment programs tailored at providing essential repairs and rehabilitation of carefully chosen, critical elements of infrastructure in order to maximise efficiency gains (mainly reduction of energy costs) within the limits of what households and public budgets can afford.

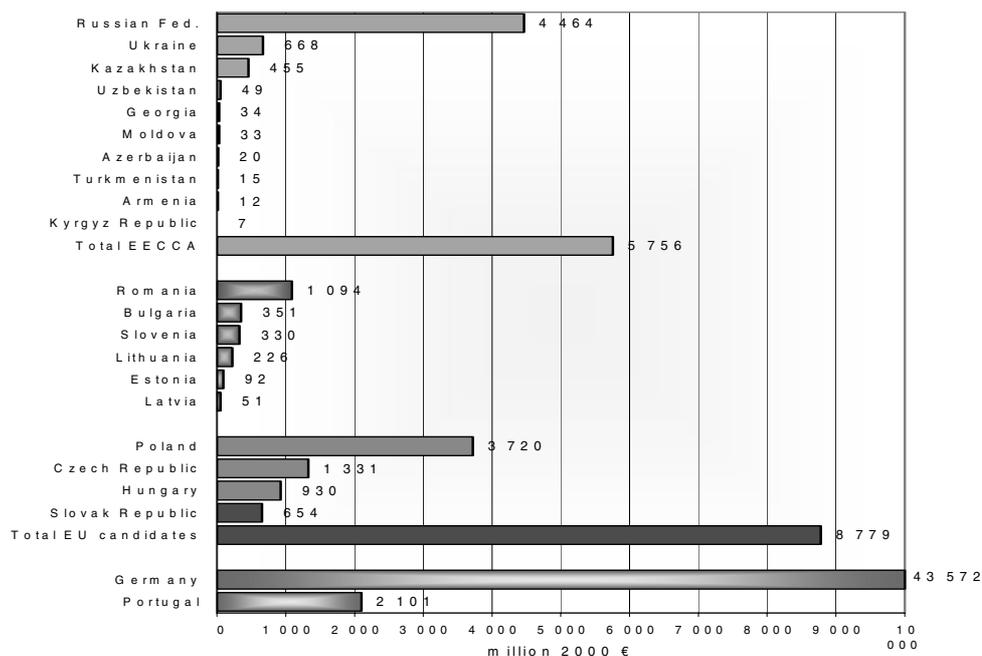
3. ENVIRONMENTAL EXPENDITURE AND FINANCING TRENDS

33. This section will further develop the analysis of the supply of finance and will build on empirical studies that have been prepared for CEE and EECCA countries. The reliability of the data in the reports requires further verification. Accordingly, the conclusions presented in this section should be interpreted cautiously, and the reader should consult the original reports for further information. Nevertheless, the data are robust enough to shed some empirical light on the scale and nature of environmental financing challenges for accession, SEE and EECCA countries, even with their very different levels of ambition and means.

3.1. Environmentally-Related Expenditure

34. The reported *total absolute volume of environmentally-related expenditures* in EECCA countries (€5.7 billion per year in 2000 or latest available) seem to be about two thirds of that in the EU accession countries (€9 billion), notwithstanding almost three times larger population (Figure 2). EECCA expenditures are overwhelmingly dominated by the very high environmentally-related expenditures reported by Russia (78% of all in EECCA countries). In EU the accession countries Poland, Czech Republic, Hungary and Romania account for 83% of aggregated expenditures. The environmental expenditures data in SEE countries are not collected at all, except some data available in Croatia, which e.g. reported €152.1 million of environmental expenditures in 2000.

Figure 2: Environmentally-Related Expenditure, €Million, 2000

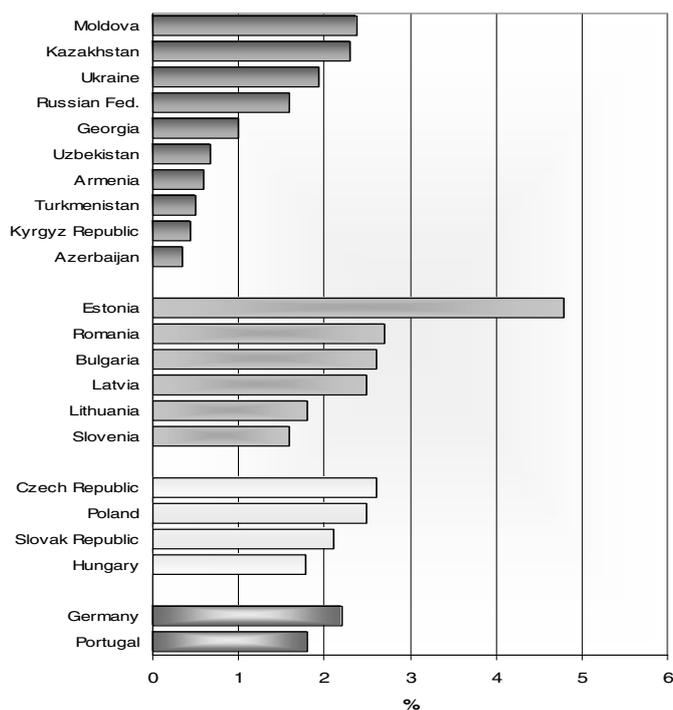


Source: Eurostat, national statistics, OECD.

For detailed notes on individual countries please see the reports on Trends in Environmental Expenditures and International Commitments in EECCA (prepared by the OECD EAP TF Secretariat) and for CEE/SEE prepared by the REC EAP TF Secretariat and submitted to the Kyiv Conference.

35. As shown on Figure 3, many EECCA countries (in particular Moldova, Kazakhstan, Ukraine, Russian Federation and Georgia) seem to devote a significant *share of their incomes to environmentally-related expenditures* (e.g. up to 2.4 % in Moldova). This is more than some EU accession countries and most EU member states. Using this indicator, it seems that most EECCA countries are more committed to improving environmental and water supply quality than is commonly thought. This suggests that at least for some countries, it may be the low ability to pay due to low incomes, rather than lack of willingness to pay in EECCA countries, that is the main obstacle to higher levels of domestic environmentally-related expenditure. On the other hand, the available data illustrated on Figure 3 show clearly that in the other EECCA countries environment has been apparently marginalized among domestic spending priorities. The differences among EU accession countries are not so significant as among EECCA countries. All of them allocate a significant portion of their domestic income for environmental expenditures – often higher than EU member states (Figure 3).

Figure 3: Environmentally-Related Expenditure as a Share of GDP, 2000



Source: Eurostat, national statistics, OECD.

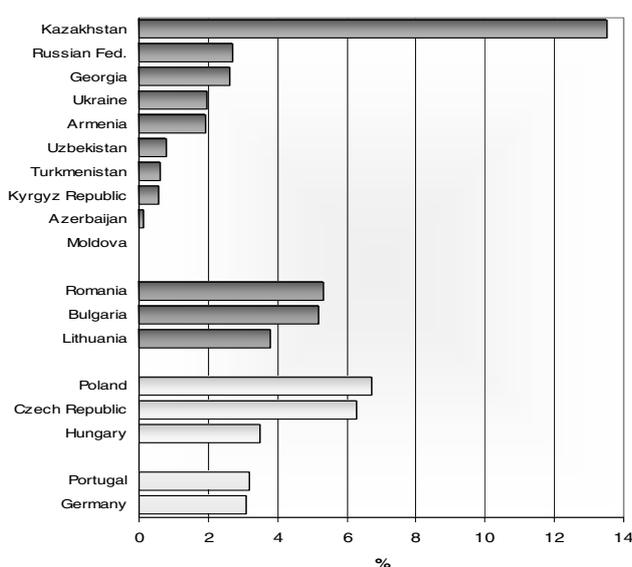
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36. The *total volume of environmental investment expenditures* in EU accession countries is, however, more than three times larger than in EECCA countries (about €4 and 1.3-1.7 billion respectively). The size of the environmental investment market in the CEE/EECCA region is still small compared with the largest EU members states (e.g. over €13 billion in Germany alone), but several countries in the region invest annually more resources in environment and water supply than e.g. Portugal (€938 million). The largest

environmental investment market in the region is Poland (over €1.7 billion annual capital spending), followed by Russian Federation (about €1.2 billion) and the Czech Republic (€0.7 billion).

37. Figure 4 shows that in EECCA countries, *environmentally-related* investments contribute to between 0.1% and 3% of *total capital investments in the economy* (Kazakhstan is an outlier and these data require further analysis). In some countries, such as Moldova and Azerbaijan, environment is a low priority in domestic investments. In countries like Russia, Georgia, Ukraine, Armenia, environmental investments account for a similar proportion of total capital investments as in some EU member states, such as Germany and Portugal. The EU accession countries usually allocate a significantly larger share of domestic investment expenditures to the environmental sector - between 3% and 4% and in some cases as much as 6%-8% of total investments in the economy. The levels of environmental investments in Bulgaria and Romania illustrate the difficulty of the environmental finance challenge that may be faced by some of the second wave accession countries: environmental investments are high compared with total national investments, but very low compared with the official estimate of investment needs. This indicates that the country may soon reach affordability limits for environmental investments, while still falling short of reaching environmental targets of EU accession.

Figure 4: Environmental Investments as a Share of Total Investments (GFCF) in the Economy, 2000



Notes:

Data should be compared with caution as definitions and sectors coverage vary across countries.

Some EECCA country did not provide data for natural resources management expenditure, water supply expenditure may be included in WWT expenditure.

Data for OECD and CEE countries include business sector investment expenditure.

a) or latest available year.

CZE) 1999 data.

HUN) Excludes investment expenditure for water supply.

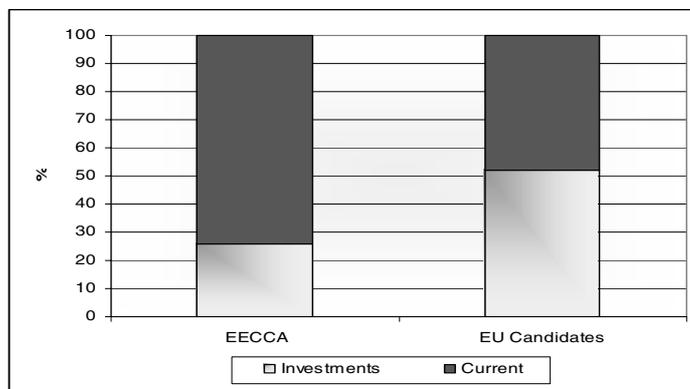
POL) 1998 data.

SVN) Business sector data refer to 1999.

Source: Eurostat, national statistics, OECD.

38. In EECCA, capital investments represent only a quarter of total environmental expenditure, with the bulk being accounted for by current expenditures (Figure 5). In contrast, in EU accession countries capital investments account for more than half of annual environmental expenditure. The high levels of environmental capital investment in EU accession countries are driven by the requirements to implement investment intensive EU environmental directives. In EECCA most resources seem to be spent on hoc repairs of infrastructure in order to prevent major disasters.

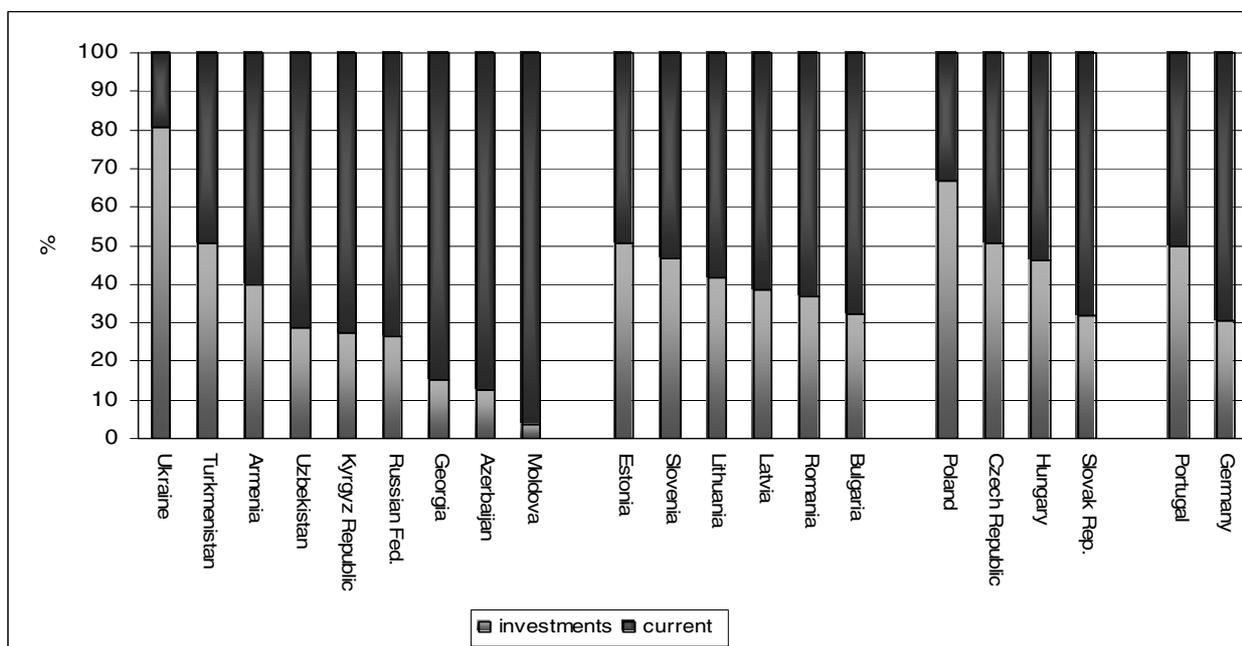
Figure 5: Shares of Investments and Current Expenditures in Total Environmentally-Related Expenditures in 2000 (or Latest Available Year) by Region



Source: Eurostat, national statistics.

39. As Figure 6 shows, the shares of total environmentally-related expenditures allocated to investments vary much more among EECCA countries (from 4% in Moldova to over 80% in Ukraine) than among EU accession countries, which all spend between 27% and 75% on capital investments.

Figure 6: Shares of Investments and Current Expenditures in Total Environmentally-Related Expenditures in 2000 (or Latest Available Year) by Region



Source: Eurostat, national statistics, OECD.

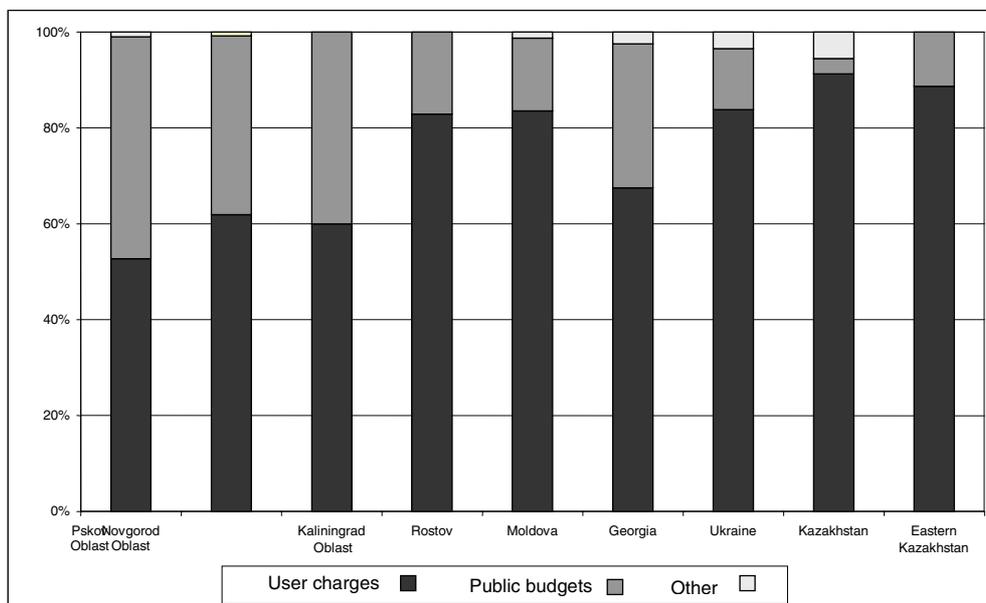
3.2. Major Sources of Financing Environmental Expenditures

40. Data on environmentally-related expenditures by sources of financing is generally much less accessible. Those available seem to indicate that *domestic rather than international sources* account for the largest share of total environmental expenditure in most EECCA and CEE countries. In ECCA, Kazakhstan, Moldova, Ukraine and Turkmenistan finance more than 90% of environmentally-related expenditures from domestic sources. However some of the poorer countries in EECAA are clearly dependent on foreign sources in financing environmental projects; for example, external finance accounts for more than a half of total environmental expenditure in the Kyrgyz Republic and Armenia. In the EU accession countries, external sources of financing, in particular pre-accession funds of EU, play a very important role in some smaller accession countries, mainly the Baltic states. Other accession countries mobilize financing primarily from domestic sources (e.g. 90% in Poland). For many SEE countries foreign sources of financing are playing the dominant role in financing environmental investments. It is especially true for Albania, Bosnia and Herzegovina and Serbia and Montenegro. In Croatia and FYR Macedonia domestic sources are relatively more important.

41. Other information on the sources of financing – public v private; financing utility investments - is very weak. However, available information indicates that while Environmental Funds continue to play an important role in some EU accession countries, they are minor if not marginal in most EECCA and SEE countries.

42. Analyses conducted for environmental financing strategies indicate that in urban water and wastewater sector user charges account for lions' shares of the supply of financing in EECCA countries. The remaining funds for water utilities come mostly from public budgets. The share of other resources such as bank credits, bonds, environmental funds, foreign grants and loans or private equity is marginal compared to user charges and public funds. (Figure 7)

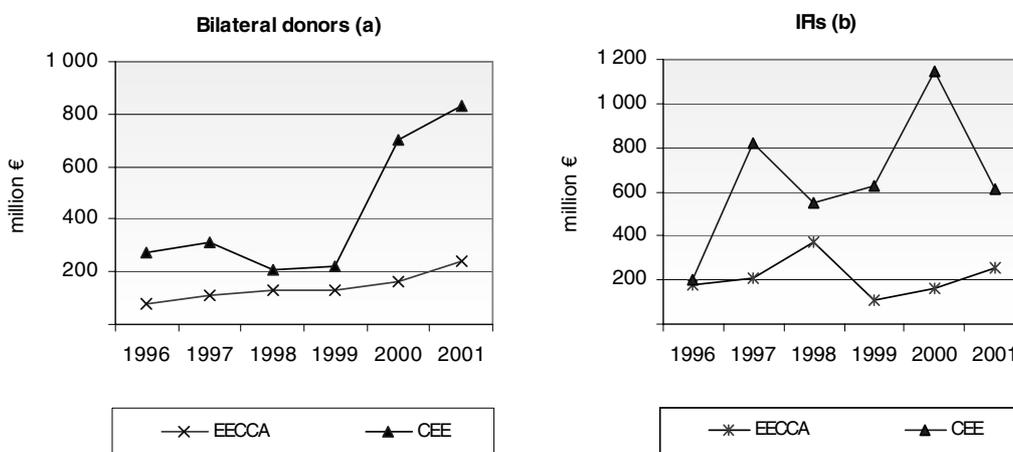
Figure 7: Existing Sources of Financing Water and Wastewater Utilities



3.3. Trends in Commitments of Donor Assistance and IFI Loans

43. **The time trends of bilateral environmental assistance** shows an increase between 1996 and 2001 both to EU accession and EECCA countries (Figure 8a). A significant – almost four-fold increase of environmental assistance to the EU accession countries since 2000 can be attributed to the commitments of the pre-accession instruments of investment support (mainly ISPA). This represents a challenge for accession countries to ensure that this investment assistance is disbursed effectively on priority projects. EU pre-accession funds have been slowly replacing bilateral environmental assistance from individual countries. This trend coupled with the overall growth in bilateral assistance to EECCA countries suggests that some “refocusing” towards the EECCA, as called for by the Ministers in Aarhus, has taken place.

Figure 8: Bilateral and IFI Assistance to EECCA and CEE Countries



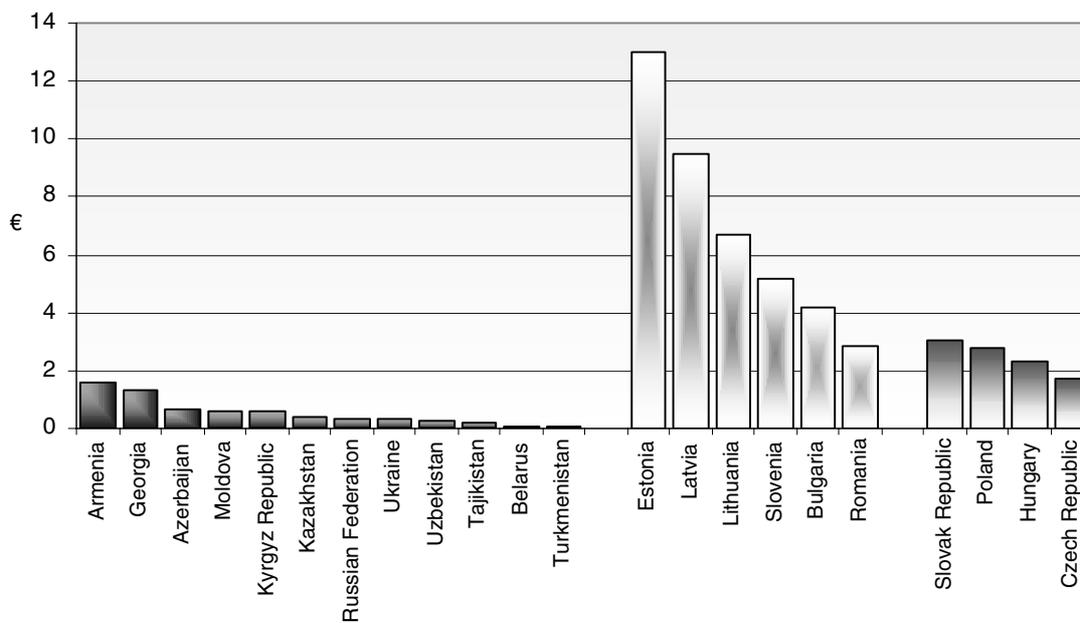
44. **Time trends in commitments of IFI loans** (Figure 8b) show larger annual variations due to fewer but larger projects. A decrease of commitments to EU accession countries in 2001 may be just the annual variations due to the business cycle or can indicate that IFIs are withdrawing from several CEE countries, some of which no longer need concessional lending. In EECCA region the Russian financial crisis in 1998 may have had some negative impact on IFI commitments, but the very low overall volume of lending makes the time trends very sensitive to IFIs programming and project development cycles. After 1998 IFI loan commitments seem to recover again.

45. In the period 1996-2001 the **total bilateral environmental assistance** to EU accession countries amounted to about €2.5 billion and to EECCA countries €0.8 billion. Environmental assistance to EU accession countries has been boosted in 2000 and 2001 with the pre-accession financial instruments to support investments, mainly ISPA. The total volume of *IFI loans* committed to environmental projects in the period 1996-2001 have amounted to almost 4 billion in EU accession countries and €1.3 billion in EECCA countries.

46. As Figure 9 illustrates, the EU accession countries have received much more **commitments of environmentally-related bilateral assistance per capita** than EECCA countries. The most successful beneficiaries were Estonia, Latvia and Lithuania. Among the EU accession countries those who are OECD members (the last four bars to the right) have received fewer commitments per capita than non-members, but still more than the highest aided EECCA country. Thus, although some refocusing towards EECCA has begun (as seen on Figure 8, if EU accession assistance is taken out), there is still a long way to go before

EECCA countries would absorb similar levels of environmental assistance as the EU accession countries in the past.

Figure 9: Donor Commitments of Environmentally-Related Assistance per Capita by Recipient Country, Average €1996-2001



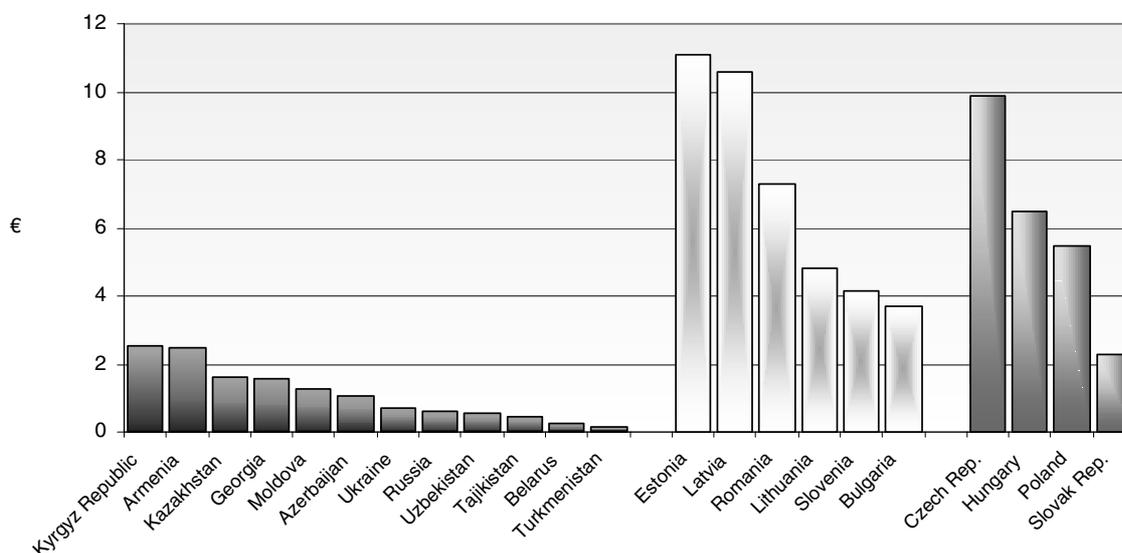
Notes:

Data for 2001 are preliminary.

Source: OECD CRS database, national data.

47. The differences between the EU accession and EECCA countries is even more apparent when looking at Figure 10, which shows **IFI commitments to environmental projects per country** over the period 1996-2001. Estonia, Latvia and Czech Republic are at the forefront of the absorptive capacity of multilateral environmental loans. The low per capita commitments of IFI loans to EECCA countries can be attributed to the low demand for environmental investments, but historical time trends also show a significant impact of the Russian financial crisis in 1998, from which borrowing capacity of the region is only slowly recovering. Surprisingly the highest per capita environmental borrowing can be found among some of the lowest income countries in the region – such as Kyrgyz Republic and Armenia.

Figure 10: IFIs' Commitments of Environmentally-Related Lending to CEE and EECCA by a Borrowing Country, Average € per Capita, per Year 1996-2001



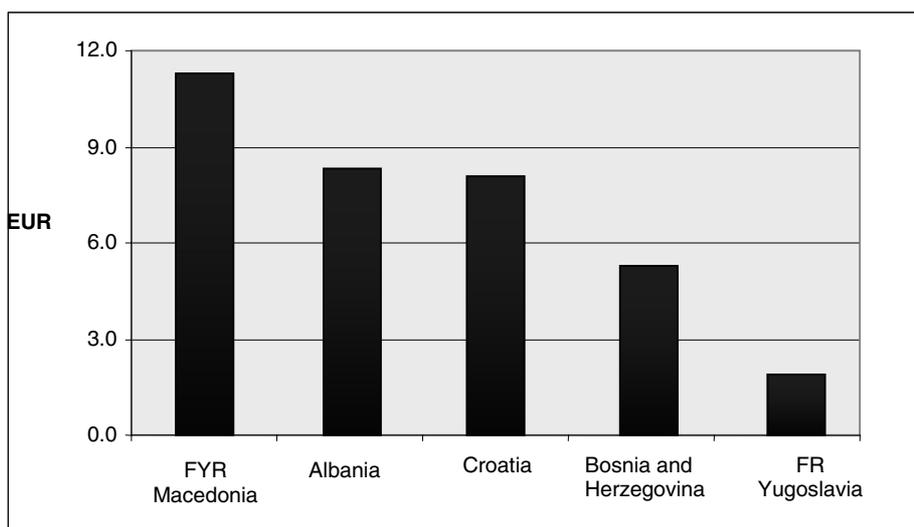
Notes:

Data refer to grants, loans, soft loans, equity, contingency financing and export credits from: ADB, EBRD EIB, NEFCO, NIB, and WB. Data for 2001 are preliminary.

Source: OECD CRS database, IFIs reporting.

48. Among the SEE countries, the highest levels of donors' assistance was received by Macedonia followed by Croatia and Albania (Figure 11).

Figure 11: Environmentally-Related Commitments to SEE, per Capita, 1996-2001 Averages



Source: Author's calculation based on OECD creditor reporting system database and Eurostat

Note: (a) Data for Serbia and Montenegro include Kosovo

(b) Data for 2001 are preliminary.

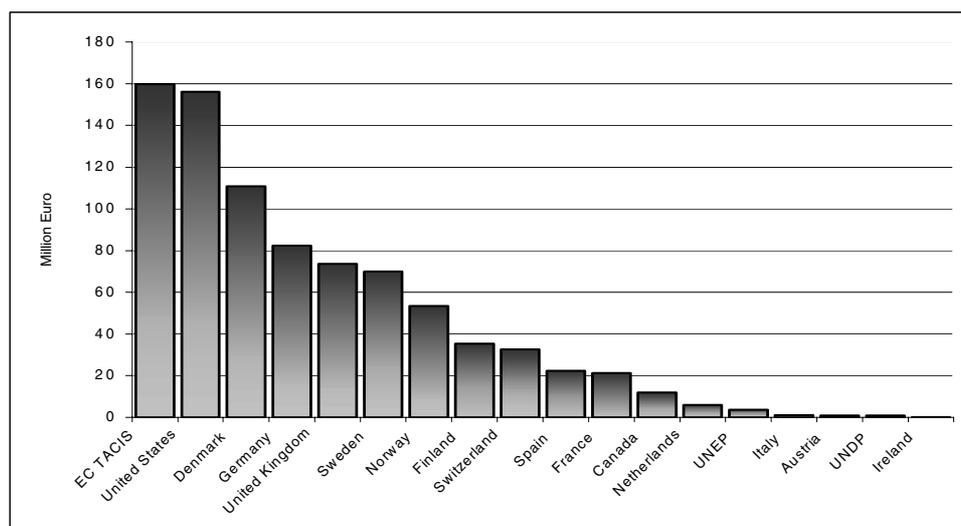
49. **The Project Preparation Committee** provides a mechanism for matching donor grants and IFI loans. The table below summarizes the environmental projects approved by IFI Boards since the PPC's establishment in 1993. Amongst other things it shows that since the Aarhus Conference, the PPC has managed to increase the number of environmental investment projects in EECCA countries, providing further evidence of a refocusing of effort on to the needs of this region.

Table 4: Summary of Board Approved IFI environmental Projects with PPC Involvement

Ministerial Conference	Water supply/ sanitation	Waste management	Energy/ heating	Nature conservation/ biodiversity	Other (e.g. agriculture, transport, industry)	Total no. of Board Approved projects	Total investment cost (€ million)	IFI financing (€ million)	Donor financing (€ million)	Per region *
Sofia 1995	8	12	4	2	7	26	1,200	n/a	80	EECCA 12% EU Access. 77% SEE 11%
Aarhus 1998	9	12	2	3	14	33	2,300	1,200	245	EECCA 30% EU Access. 46% SEE 24%
Kiev 2003	37	8	13	4	11	69	3,853	1,895	904	EECCA 42% EU Access. 32% SEE 26%
Total	54	32	19	9	32	128	7,353	3,095	1,229	EECCA 28% EU Access. 52% SEE 20%

50. The **breakdown of environmental assistance by donors** shows that in EECCA countries, EU TACIS and the United States were the major sources of environmentally-related assistance, followed by Denmark and Germany (Figure 12). In the EU accession countries (Figure 13), EU pre-accession instruments overwhelmed bilateral assistance, but Denmark and the USA were also important sources.

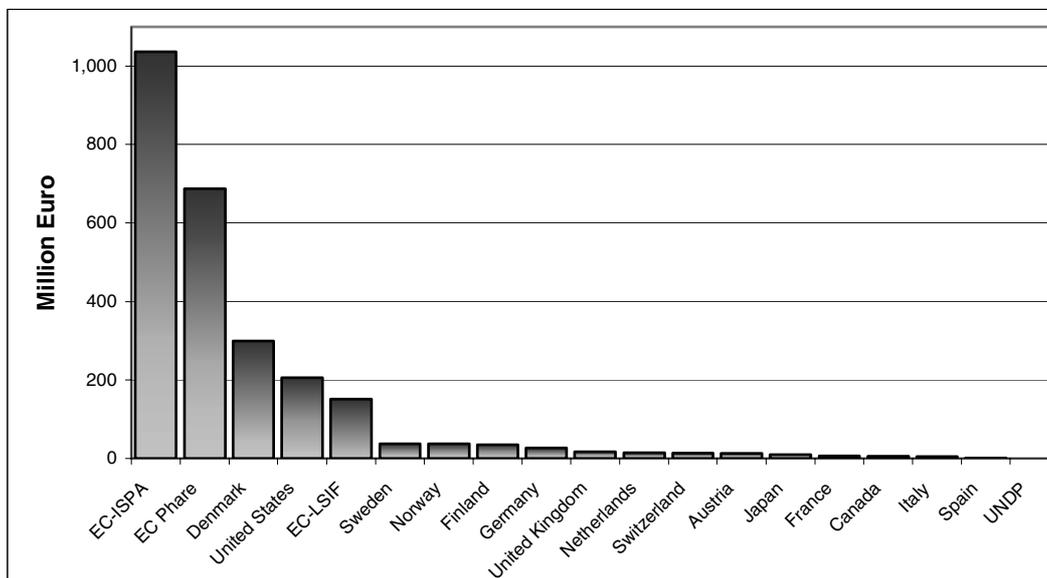
Figure 12: Commitments of Environmentally-Related Assistance to EECCA by Donor, Total 1996-2001, €Million



Notes:

Excluding commitments for projects involving country from both CEE and EECCA regions. 2001 data are preliminary.
 Source: OECD CRS database, national data.

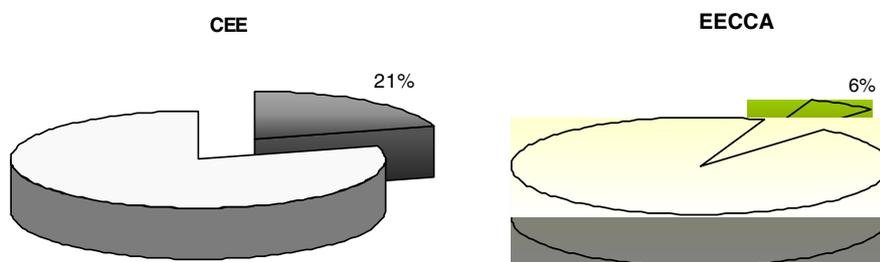
Figure 13: Commitments of Environmentally-Related Assistance to CEE by Donor, Total 1996-2001, €Million



Notes: 2001 data are preliminary.
 Source: OECD CRS database, national data.

51. In the EU accession countries, environmentally-related assistance accounted for a larger **share of total assistance** than in EECCA countries (21% and 6% respectively), as Figure 14 demonstrates. This indicates a potential for enhancing environmental assistance to EECCA countries without increasing the overall envelope of bilateral assistance. Refocusing priorities in international co-operation programs towards environment would require a clear demand by the EECCA countries themselves that needs to be agreed and articulated at the highest levels of the government. For example, Kazakhstan is the only EECCA country to have prioritized environment within the EC/TACIS program, thereby limiting access to substantial resources. It would also require a high governance standards and adequate capacity to absorb assistance and to implement and co-finance projects by the relevant public authorities in EECCA countries.

Figure 14: Share of Environmentally-Related Assistance of Total ODA/OA, 1996-2000



Source: OECD CRS and DAC databases, donors reporting.

The Role of the REReP for SEE Countries

The Regional Environmental Reconstruction Programme proved to be a successful model for mobilising and coordination of the donors' assistance. Within the framework of the REReP the SEE ministers of environment identified a list of regional projects, which could seek donors' and IFIs support.

In the period of 1999-2001 almost 20 million Euro was committed within the framework of the mechanism by individual donor countries and the European Commission. Financing was provided in the four priority areas, i.e. institution strengthening and policy development, support to environmental civil society, support to environmental regional co-operation mechanisms and cross border projects as well as reducing environmental health threats and the loss of biodiversity.

The highest commitments were provided by the Netherlands and the European Commission, accounting for 31.6% and 29.9% of the total amount, respectively. Significant commitments were also provided by Germany (10.4%), Switzerland (8.8%) and Denmark (7.7%).

The highest commitments were provided by the Netherlands and the European Commission, accounting for 27.7% and 29.3% of the total amount, respectively. Significant commitments were also provided by Denmark (12.5), Germany (11.0%), and Switzerland (8.1%).

Source: REC for CEE REReP Secretariat

4. STRENGTHENING ENVIRONMENTAL FINANCE: CHALLENGE FOR ENVIRONMENT FOR EUROPE PROCESS

52. The final section identifies some of the steps that should be taken to strengthen the use of financial resources for achieving environmental objectives in light of the “financing gaps” that exist in different sub-regions. One of the key messages from the Environmental Action Programme for Central and Eastern Europe is worth repeating in this context: financing is one instrument for achieving environmental goals. If it is not used carefully in combination with complementary policy and institutional reforms and capacity building, it is likely that resources will be wasted and objectives not achieved.

4.1 Strengthening the Policy and Institutional Framework

53. *EECCA countries* face substantial challenges in establishing the policy and institutional frameworks required for functioning market-based, democratic societies. These include: fighting corruption, in establishing the rule of law and predictable national policies, promoting competition and a level playing field for domestic and foreign enterprises, and decentralising appropriate responsibilities to the local level. Establishing effective systems of local government and “corporatising” utilities provide an essential basis for maintaining and upgrading environmentally-related infrastructure. These tasks are generally beyond the competence of Ministries of Environment, but they affect their operations and strongly influence the demand for, and supply of, finance in the environmental sector.

54. There are a number of areas that are within the competence of Environment Ministries and where action on their part could strengthen environmental financing:

- **Redesign policies, programs and regulations.** Establishing effective demand for environmental investments and financing will require realistic environmental policies, which are oriented towards clear environmental results and are firmly based on internationally-recognised principles (e.g. subsidiarity, efficiency, the polluter-pays principle). Such policies should be supported by a regulatory framework and a mix of policy instruments that are predictable over the long term and consistently enforced. These policies should form part of a new generation of environmental programs with clear priorities, specific and realistic targets, and supported by robust investment and financing strategies (see below).
- **Establish an appropriate incentive structure.** In creating credible and effective policies, it is essential that an appropriate mix of “carrots and sticks” be applied in a consistent and fair manner. Enforcement of environmental requirements should apply equally to public institutions and enterprises. Creating the right incentives implies, among others, strengthening enforcement of environmental laws, promoting compliance, and reducing the discretion of inspectors. The “dependency culture” whereby virtually all environmental investments involve some form of public subsidy must be gradually replaced by implementation of the Polluter-Pays Principle.
- **Redefine relations with stakeholders.** Environment Ministries need to engage enterprises, municipalities and other stakeholders in a different way in order to develop and implement more effective environmental policies. The role of the state must shift from directing to regulating economic activity. They need to be engaged in the preparation of laws and regulations, and they

need information and support in order to understand and comply with their responsibilities. Establishing a stable and predictable environmental regulatory framework, with appropriate incentives, is essential for promoting more environmental investments by enterprises and municipalities and utilities.

55. Most *EU accession countries* are well on the way to implementing the recommendations identified above. The key challenge accession countries face in the policy field is to identify the most cost-effective ways of transposing EU environmental directives. Although flexibility is limited, it still exists and could help to reduce compliance costs and the level of associated investments. For example, national authorities have flexibility to decide how to achieve compliance with local air quality standards or with the waste water directive in the smallest communities. These choices could have a significant influence on compliance costs. Similarly, costs can be reduced in some cases by focussing on environmental quality objectives rather than technological requirements, or by applying economic instruments.

4.2. Strengthening Municipal Finance and Financial Sustainability of Environmentally-Related Utilities

56. Accession countries have made significant progress in decentralising municipal services, in strengthening the fiscal position and investment capacity of local governments, and in transforming utilities into more efficient, financially viable, autonomous, commercially run entities. EECCA countries should draw upon this experience and work with donors and IFIs, e.g. within the framework of the EAP Task Force and the PPC, towards accelerated institutional reform of the municipal environmental utility sector in particular in the following areas:

- **Rationalising decentralisation and improving fiscal relations between governments at different levels.** One obstacle to investment capacity of municipalities and to structuring municipal finance projects is related to the difficulty in predicting local revenues, which are often subject to annual changes in tax policies at regional or central levels. In the medium to long run, this issue must be addressed by comprehensive reform of the division of responsibilities and fiscal relations between all levels of the government according to well established international standards. IFIs sometimes use temporary solution, the project-specific Inter-Budgetary Fiscal Agreements between the superior tax level and the local government, which guarantee the fiscal stability of the local government for the life of specific loans.
- **Strengthening financial management and capital budgeting in municipalities.** This could be done through preparation and implementation of Multiyear Investment Plans for Municipal Infrastructure and related Creditworthiness Enhancement Programmes that take a long-term perspective on achieving cost savings, and improving the local governments' financial management, efficiency and credit quality. Partnerships and twinning arrangements between donors/EU Accession and EECCA/SEE municipalities to facilitate the transfer of knowledge could be fostered.
- **Improving the managerial, financial and operational autonomy of local service providers** is an essential condition of sustainability of local environmentally-related services. Improvements in these key areas - particularly control over revenue flows- protect the utilities from undue political interference and enable them to operate in a more transparent and accountable manner. This objective can be achieved, for example, through the introduction of management contracts with private operators or the introduction of service agreements to formalise and underpin the relationship between the city and the utility.
- **Strengthening financial sustainability of municipal environmental services.** Achieving expenditure targets in particular in infrastructure, in both accession and EECCA countries will require increasing tariffs for water and other environmentally-related services, with the ultimate goal of full cost recovery, including capital replacement costs. A clear, transparent and predictable

mechanism for tariff setting should be established, shielded from undue political interference. An intermediate goal could be to ensure that at least operation and maintenance costs are covered by tariffs. Measures may also be needed to ensure that the poor are not deprived of access to essential services. This implies the parallel development of more targeted assistance schemes for such groups.

- **Increase sub-sovereign international lending.** Central governments tend to assign the responsibilities for, and financing of, environmental and general infrastructure to local governments. By lending directly to local governments at regional or municipal levels, the municipal infrastructure sector can benefit from non-sovereign financing. Such sub-sovereign lending operations can enable accelerated project development.
- **Involving private sector in provision of services.** Engaging the private sector in the provision of environmentally-related services such as water supply and sanitation, solid waste management or district heating can improve efficiency of operations and provide access to private finance, thereby relieving public budgets. However, experience suggests that the public should be fully involved in such decisions and an appropriate regulatory and incentive framework should be in place to ensure the delivery of public goods at least cost and avoiding any misuse of monopoly power. There are still many obstacles to PPPs in EECCA region – financial, social, political and institutional. Experience is accumulating in a number of EU accession countries, and to a limited extent in EECCA countries. It will be important to keep this under review and to promote further dialogue between governments, the private sector, IFIs donors and the public in order to identify approaches that might be applied in accession or EECCA countries.

4.3. Improving the Environmental Expenditure Data and Information

57. In most transition countries strengthened efforts are needed to improve the collection of environmentally-related expenditure data. These data provide an important basis for developing effective and efficient environmental policies. Knowledge of trends in investments and current expenditures made by enterprises, municipalities and state budgets, as well as their sources of funding, helps to: evaluate whether enough resources are devoted to environmental problems considered as priorities in national strategies for environmental protection; identify possible financing gaps and opportunities to increase the efficiency of the environmental expenditure; identify trade-offs between different priorities, e.g. between new investments and maintenance of the existing capital assets. This information also helps identify where the bottlenecks lie and how to better target government interventions to influence private and public financial flows to the environmental sector. Information should be gathered on a regular basis, according to international standards, and aggregated transparently in various profiles – by who spends and who finances, by investment versus current expenditures, public versus private etc.

58. EU accession countries have begun to collect environmental expenditure data within the framework of Eurostat. However, in EECCA countries, preparation of analysis for the Kiev Conference was for many countries the first time that data was compiled using internationally-established methodologies. Data collection revealed the need to review and redesign the present environmental expenditure data collection systems in almost all EECCA in order to make them comparable with Eurostat/OECD standards. The same is true for SEE countries. A demonstration project in Georgia implemented in 2000 – 2002 illustrates how this might be achieved. Environmental authorities and statistical services in EECCA and SEE countries will need training in internationally-recognised methodologies and environmental expenditure classifications.

4.4. Making Better Use of Existing Resources

59. A number of measures can be taken to make better use of existing resources:

- **Streamline public spending for environment under clear expenditure programs.** All EU accession, EECCA and SEE countries need to develop environmental investments plans that are realistic and cost-effective in order to achieve their respective objectives. Existing programs should be checked for their financial viability and revised as appropriate. Clear, strategic programmatic frameworks should help focus scarce public sector resources on priority environmental sectors, mainly environmental infrastructure, where public financial support is essential. This does not require governments to develop and manage long project pipelines. Rather governments should establish realistic targets and schedules for infrastructure development, apply robust economic and social analytical tools to estimate the time profile of expenditure needs (capital and O&M) to achieve the targets, and link these targets to available sources of public and private finance. An important element will be to identify and implement specific policy measures that will provide incentives for the private, public and foreign sources of financing to deliver needed resources on time and in the form that match projects' financing needs. Affordability constraints, both at a household and national level, should be explicitly analysed and mitigated. These activities should be publicly reviewed and widely agreed by all relevant stakeholders. One analytical and methodological framework for developing financial appraisal of investment programs is "FEASIBLE", an environmental financing strategy model developed within the framework of OECD/EAP Task Force with Danish support.
- **Implement good international practices in managing public environmental expenditures in the areas of environmental effectiveness, fiscal prudence and management efficiency.** Environmental authorities should ensure that all public environmental expenditure programmes and institutions managing them contribute to achieving priority environmental objectives. Institutions for managing public environmental expenditures should be shielded from undue political interference, ensure cost-effective use of resources, comply with high international standards of governance, management efficiency, accountability, transparency and fiscal prudence. Good Practices of Public Environmental Expenditure Management, developed within the OECD/EAP Task Force framework, could be used as a framework for reforming institutional framework for managing public environmental expenditures. This reform is urgently needed in particular for Environmental Funds because of their visibility in the policy debates.

4.5. Mobilising Additional Resources

60. A number of steps could be taken, particularly in EECCA countries that could help raise additional resources for environmental investments:

- **Removing environmentally perverse subsidies.** Considerable scope exists in many EU accession and EECCA countries to reduce the level of subsidies for energy, water and other resources that result in adverse environmental impacts. In principle the savings to the public budget could be used to support environmental expenditures, though this is often difficult to achieve in practice and may not always be efficient.
- **Maximize the revenue raising potential of existing environmental charges.** The current system of environmental charges in EECCA countries are not effective for raising revenues or for establishing disincentives to pollute. A number of steps could be taken to make the charge system more effective from a revenue-raising perspective, including: reducing the large number of pollutants subject to a charge; implement consistent and credible systems of collection; eliminate off-sets and other non-monetary transactions; reduce the discretion of the authorities in implementing the system; and generally simplify and focus the existing system. Charge rates for carefully selected pollutants could be gradually increased to efficient levels, once reformed

systems are in place. They should be indexed to inflation to mitigate the erosion in their real value over time.

- **Introduce new environmentally-related taxes, charges and other payments for environmental services where warranted.** This may include fiscal instruments to capture rents (excess profits) that private agents earn on exploiting natural resources. Opportunities exist to introduce carefully selected new environmentally motivated taxes (that go to the general budget) and charges for useful services that environment generate (that are earmarked for ensuring sustainable delivery of these environmental services). Experience from OECD countries suggests for example that product taxes/charges yield more revenue than pollution taxes/charges, and that these revenues are more predictable. They may also be introduced in a budget neutral way by reducing other taxes/charges. Attention needs to be paid to the social aspects and wider economic impacts of such policies, thus thorough ex-ante analysis and mitigation measures should be developed as needed.
- **Promote better access to capital and financial markets.** As cities and utilities in EU accession countries have established their creditworthiness, they have been able to access capital and financial markets, for example by issuing bonds, in order to finance environmentally-related infrastructure. The same is true for access to products offered by financial institutions (banks, leasing firms) for environmental and infrastructure projects. These trends are likely to grow, although EU accession governments may need to review some of the perverse incentives that may prevent financial markets to see opportunities in environmental sector – e.g. crowding out of bank products by public subsidies. Access to capital and financial markets in EECCA countries is more potential than actual. The framework conditions that should be in place for municipalities, municipal utilities and private agents to access capital and financial markets for financing environmental projects should be examined as well as the steps that municipalities and utilities can take to enhance their creditworthiness and to make the best use of their resources in investment planning.

4.6. Strengthening International Partnerships

61. For the EU accession countries from the first enlargement wave, the coming years will mark a gradual shift of roles in international partnerships – from recipients of assistance to emerging donors. They need to carefully define their priorities and niches, as their ability to provide large scale foreign assistance will be limited for many years. Assistance to EECCA and SEE countries could be a natural focus, especially to share the knowledge of transition. On the other hand accession countries will be tightly engaged in partnership with other EU member states in the framework of EU instruments of structural and cohesion policy. Additional effort is needed to increase capacity to absorb post accession assistance of Structural and Cohesion Funds, through better financial and investment strategies and project pipeline management.

62. It seems unlikely that EECCA countries will be able to operate and maintain environmentally-related infrastructure, let alone to further expand it or to achieve the Millennium Development Goals, without increased levels of environmental assistance. Some recent analyses, for example called for a doubling of water-related ODA globally in order to meet the water and sanitation targets. Currently, environment accounts for a smaller proportion of total assistance flows to EECCA than other regions. This suggests that there may be scope to further increase environmental assistance within existing budgets. However, EECCA countries could facilitate the benefits of international partnerships and further attract international environmental assistance flows by assigning clear priorities to environment in foreign co-operation programs.

63. Environment authorities have no influence on sovereign creditworthiness but they could influence the “bankability” of environmental projects by promoting a clear and predictable regulatory and policy and programming framework, as well as enhanced managerial autonomy and financial viability of environmental utilities. Investment and borrowing capacity of municipalities and municipal utilities can be

strengthened through improved fiscal relations with higher levels of government and through modern financial and investment management tools, such as multiyear investment programs and international accounting standards.

64. Both EECCA and accession countries can also leverage more external funds by strategically using their scarce funds in the public sector for co-financing donor and IFI funded projects. Clear and predictable rules and priorities for co-financing need to be developed in order to maximize the leveraging effect and ensure cost-effectiveness and additionality. Cooperation with the PPC could be helpful in this respect. New, innovative approaches to partnership could also be developed such as the recent initiative by Georgia and Kyrgyz Republic to consider debt for environment swaps that simultaneously serves the poverty reduction and sustainable development purposes. These initiatives could serve as a model for other poor, indebted countries of the region. Another example of pan-European partnership is the work of the ad hoc European Task Force on Banking, Business and Biodiversity to elaborate a European Partnership Agreement to promote financial investment related to biodiversity. While it is clear that financial institutions are not the main source of funding for biodiversity relevant projects, which will continue to require public investments, a combination of these public funds with bankable investments, loans and grants could considerably increase the scope for biodiversity resourcing. The main instrument of the Banking, Business and Biodiversity in Europe initiative is a proposal for a Biodiversity Finance Facility (BFF) under the leadership of EBRD.

65. Opportunities for strengthening the financial dimension of international environmental partnerships also exist in the framework of global environmental mechanisms such as the Framework Convention on Climate Change and the Global Environmental Facility.

66. Finally, all of the areas identified above where further efforts are needed will require enhanced technical cooperation and capacity building. In this connection, it has been proposed that the EAP Task Force and PPC cooperate together in a new initiative after Kiev to strengthen local capacity for investment planning.