



**Economic and Social
Council**

Distr.
GENERAL

ECE/CEP/AC.11/2007/15
15 May 2007

ENGLISH
Original: ENGLISH, FRENCH
AND RUSSIAN

ECONOMIC COMMISSION FOR EUROPE

COMMITTEE ON ENVIRONMENTAL POLICY

Ad Hoc Preparatory Working Group of Senior Officials
“Environment for Europe”

Fourth meeting
Geneva, 30 May – 1 June 2007
Item 2 (f) of the provisional agenda

PROVISIONAL AGENDA OF THE SIXTH MINISTERIAL CONFERENCE
“ENVIRONMENT FOR EUROPE”

PARTNERSHIPS

**MOBILISING FINANCE FOR ENVIRONMENTAL PRIORITIES:
RECOMMENDATIONS FOR THE FUTURE¹**

Proposed category I document²

Submitted by the PPC, the World Bank, the REC-CEE and EAP Task Force³

¹ The text in this document is submitted as received from the authors.

² Documents for possible action by Ministers (signature, endorsement, approval, adoption, discussion) submitted through and endorsed by the WGSO (ECE/CEP/AC.11/2006/5, Section II).

³ The Project Preparation Committee (PPC), the Regional Environmental Centre for Central and Eastern Europe (REC-CEE), and the OECD Task Force for the Implementation of the Environmental Action Plan (EAP TF).

CONTENTS

	<i>Paragraphs</i>	<i>Pages</i>
Executive summary		2
I. RECOMMENDATIONS	1	3
II. ENVIRONMENTAL CHALLENGES AND NEW FINANCING OPPORTUNITIES IN EECCA AND SEE ..		6
A. Environmental Challenges and Financial flows	2-6	6
B. New Opportunities for environmental financing	7-10	7
III. THE ROLE OF DOMESTIC FINANCE		8
A. Public domestic finance	11-16	8
B. The role of the private sector	17-28	10
IV. THE ROLE OF INTERNATIONAL FINANCE		15
A. The need for sustained official development Assistance for the environment	29-33	15
B. Optimizing the use of international assistance	34-36	16
C. Improving conditions for external borrowing for environmental improvements.....	37-39	17
V. THE NEED FOR EFFECTIVE PROJECT PREPARATION	40-44	18
Abbreviations and acronyms		21

Executive summary

This paper identifies actions that could be taken by actors in the “Environment for Europe” process to ensure that adequate levels of finance are available for environmental improvements in the countries of Eastern Europe, Caucasus and Central Asia (EECCA) and South-Eastern Europe (SEE). It provides a brief assessment of the trends in environmental expenditure and access to finance in the region and considers the roles of public, private and international sources of finance and the opportunities these present for supporting environmental improvements.

Most countries in the region have resumed sustained economic growth but this has not always improved access to environmental finance. Reasons for this include a reluctance to prioritize the environment in national development strategies, poor inter-governmental coordination and planning at national and local levels, a lack of incentives for improved environmental performance, and barriers to project development. Low-income countries suffer from more limited access to affordable finance.

EECCA and SEE governments (specifically Environment Ministries), donors, international bodies and the private sector need to find innovative ways of optimizing flows of environmental finance, including by:

- (a) prioritizing the environment in national and sub-national development strategies and aligning the management of public environmental expenditure with best international practice;
- (b) increasing environmental expenditure as a percentage of GDP to levels comparable to those in Central and Eastern Europe (CEE), and aligning the share of expenditure allocated to investments with those in OECD or CEE countries;
- (c) supporting medium-term budget frameworks and preparing sound environmental investment programmes within these frameworks in cooperation with Ministries of Finance;
- (d) implementing adequate legal and institutional frameworks as soon as possible to take advantage of new opportunities for environmental financing, such as local financial markets, carbon financing mechanisms and debt-for-environment swaps;
- (e) encouraging more private sector finance by implementing market-friendly reforms of environmental policies and institutions;
- (f) aligning donor and IFI assistance plans with environmental investment programmes, using performance-based aid instruments to create clearer incentives for results;
- (g) attracting more international finance in middle-income countries by making it more accessible at sub-national levels; and providing sustained donor grant co-financing for low-income countries to make IFI loans accessible;
- (h) providing assistance to build local capacity for the preparation of viable environmental investment projects.

I. RECOMMENDATIONS

1. At the Sixth Ministerial Conference “Environment for Europe” in Belgrade, Ministers may wish to consider the following recommendations for promoting the mobilization of environmental finance in EECCA and SEE beyond 2007:

Better use should be made of increased domestic public financial resources.

- (a) EECCA and SEE countries could consider increasing the level of public environmental expenditure as a percentage of GDP to levels that enable environmental policy objectives to be achieved, and focus them on national priorities; this is already the case in large EECCA countries (Kazakhstan, Russian Federation and Ukraine) where the ratio is above 1.2 per cent, but in smaller countries the ratio can be as low as 0.2 per cent⁴.

⁴ Trends in Environmental Finance, EAP Task Force, 2007.

- (b) Governments could consider introducing medium-term expenditure frameworks for predictable budget support of priority large-scale public investments. Environment Ministries could ensure the prioritisation of environmental expenditure in public expenditure frameworks by preparing result oriented and economically sound environmental programmes, including high-quality investment proposals and financing strategies for their implementation. Donors should align their national assistance plans with these domestic investment priorities. The design and implementation of public environmental expenditure frameworks could be guided by best international practice such as the *OECD Draft Council Recommendation on Good Practices for Public Environmental Expenditure Management* (OECD, 2006).
- (c) Additional domestic resources could be mobilised by governments in order to achieve the MDG targets of access to municipal environmental infrastructure measured by complementary indicators of quality, safety and sustainability of infrastructure services. In particular, governments could consider encouraging the financial autonomy of utilities and appropriate tariff reforms so that operation and maintenance, and in the longer run investments, can be financed primarily through user charges while ensuring that poorer users receive adequate social protection.
- (d) Countries listed in Annex B to the Kyoto Protocol could harness potentially significant additional environmental public revenues from international emissions trading by promptly implementing procedures and meeting conditions for the approval of Joint Implementation (JI) projects and implementing green investment schemes.

National authorities in EECCA and SEE countries could mobilise more environmental finance by creating more suitable climates for private sector participation in environmental improvements.

- (a) Governments can play a critical role in creating appropriate frameworks to incentivise financial and capital markets to finance environmental services, in particular in energy efficiency, renewable energy sources, agriculture, tourism, forestry, water resources and waste management.
- (b) Greater private sector participation in environmental infrastructure investments could be facilitated by improvements in the regulatory environment, in particular with regard to pricing policies for environmental goods and services⁵.
- (c) Reforms of environmental permitting and compliance instruments to encourage private enterprises and the financial community to invest in improving ongoing environmental performance and cleaning up past environmental liabilities could be based on international best practice such as, for example, EU standards and *OECD Principles of Effective Environmental Permitting Systems* (OECD, 2007).

⁵ [Financing Water Supply and Sanitation in Eastern Europe, Caucasus and Central Asia](#), OECD, 2006.

- (d) The use of economic instruments in EECAA and SEE could be strengthened, for instance by using them primarily to provide incentives for pollution abatement instead of generating government revenues.
- (e) The international community could provide guidance for policy reforms, technical experience and catalytic financial support, with EECCA and SEE countries taking leadership and ownership of their policy reforms.

Adequate levels of international environmental assistance to the region should be sustained and should support national environmental priorities.

- (a) IFI lending for environmental investments could be made accessible for low-income countries through the provision of adequate donor grant co-financing.
- (b) IFIs and donors should assist EECCA and SEE countries in taking advantage of alternative financing mechanisms such as carbon financing.
- (c) IFIs and donors should consider the use of performance-based aid instruments to create incentives for environmental improvements and reforms.

EECCA and SEE countries would benefit from better access of local jurisdictions to environmental finance.

- (a) There is room to improve intergovernmental transfers and their capacity to contribute to environmental expenditure⁶.
- (b) Local capital and financial markets could be harnessed to channel additional financial resources for the environment at the local level (see Local Capital Markets for Environmental Infrastructure, OECD, 2006).
- (c) Middle-income countries could improve access to international finance at sub-national levels by prioritising projects for IFI investments and undertaking appropriate institutional and sector reforms.
- (d) These measures would be even more efficient if local jurisdictions improve their capacity to plan (the Multi-Year Investment Planning tool and associated training materials developed by the EAP Task Force could help in this regard).

EECCA and SEE countries could access more finance for environmental investments by building their capacity for project preparation.

- (a) National and sub-national authorities need to be able to identify priority environmental investments and help project owners, in particular utilities, to prepare viable environmental investment projects.
- (b) Governments, IFIs and donors could contribute towards this by supporting appropriate institutional reforms, building capacity through client involvements in the process of designing and implementing investment projects and building up the pool of local consultancy capacity for project preparation.

⁶ Intergovernmental Transfers for Environmental Infrastructure, OECD, 2006.

II. ENVIRONMENTAL CHALLENGES AND NEW FINANCING OPPORTUNITIES IN EECCA AND SEE

A. Environmental challenges and financial flows

2. Despite the progress that has been made across the region over the past fifteen years, the countries of Eastern Europe, Caucasus, Central Asia and South-Eastern Europe still face significant environmental challenges, as detailed in the report *Europe's Environment: the Fourth Assessment*, prepared by the European Environment Agency, and the report *Progress in Environmental Management in Eastern Europe, Caucasus and Central Asia*, prepared by the EAP Task Force. There is a risk that the environment-related Millennium Development Goals (MDG), including the reversal of the loss of environmental resources and halving the proportion of the population without access to safe water and sanitation, will not be reached in some EECCA and SEE countries. In addition, SEE countries face challenges in meeting EU environmental standards as part of the EU accession process.

3. Environmental pollution is a persistent problem with serious impacts both on prospects for economic growth and public health, especially for the poor. Access to safe water and sanitation is highly variable across the region, especially in rural areas and for the poorest and most vulnerable sections of the population. In urban areas, a relatively large share of the population is connected to centralized water and sanitation infrastructure, but a much lower proportion enjoys access to safe and sustainable services. For example, 33 per cent of households in Tajikistan and 21 per cent in Albania have access to safe and sustainable water supplies. For sustainable access to sanitation the picture is even starker. Less than 10 per cent of the population in each of these two countries has access to reliable and safe sewage disposal⁷. It is estimated that a doubling of current financing levels would be required to achieve the water-related MDG, although current UN estimates significantly underestimate the scale of this challenge, with negative implications for the prioritization of financial allocations at national and international levels.

4. Reliable access to finance is essential for addressing these environmental challenges. This encompasses private and public financing for investments in environmental infrastructure, energy efficiency and renewable energy, pollution control, natural resource management and biodiversity. However, the reports on trends in environmental expenditure in EECCA and SEE, prepared respectively by the EAP Task Force and the Regional Environment Center (REC) for Central and Eastern Europe, show that currently available expenditure, both public and private, may be unevenly spread between sectors in some countries.

5. In EECCA countries overall, total environmental protection expenditure has increased, albeit slightly, in constant dollar terms since 2000. In some countries (e.g. Armenia, Azerbaijan, Kyrgyz Republic and Moldova) the level of expenditure remains very low in relative and absolute terms (below US\$5 per person per year)⁸. With the exception of Moldova, the share of public environmental expenditure in general government expenditure is marginal (below 0.5 per

⁷ Monitoring what Matters, World Bank, 2007.

⁸ The figures used in this section are taken from *Trends in Environmental Finance*, EAP Task Force, 2007 (Category II document).

cent). Investment represents less than 15 per cent of environmental expenditure, with the exception of Armenia (35 per cent in 2005, up from 7 per cent in 2000). These countries spend their meagre resources mainly in the wastewater sector, with very little expenditure reaching other sub-sectors. Environmental expenditure has enjoyed steady growth in the three major economies (Kazakhstan, Russian Federation and Ukraine) since 2002. However, the volume of expenditure remains low compared to CEE countries, with the notable exception of the Russian Federation. In these bigger economies environmental expenditure has only partially benefited from the robust macroeconomic performance. Kazakhstan is the only country where environmental expenditure has risen as a share of GDP and as a share of public expenditure since 2000.

6. Wastewater receives the highest share of environmental expenditure (between 43 and 67 per cent of the total); air pollution mitigation and climate change attracts a significant share of the total in industrialised economies (Kazakhstan, Russian Federation and Ukraine) and in Armenia and Belarus; waste attracts relatively little attention, except in Kazakhstan. In all EECCA countries the business sector and the government have contrasted investment patterns: the public sector concentrates on wastewater, whereas the primary focus of the private sector is air pollution mitigation and climate change. Trends in environmental financing in South Eastern Europe are detailed in the Category II document entitled *Trends in Environmental Financing in SEE* (REC for Central and Eastern Europe, 2007).

B. New opportunities for environmental financing

7. Since the last “Environment for Europe” ministerial conference in Kiev in 2003 the context for the delivery of environmental finance in EECCA and SEE has evolved considerably. The expansion of the EU to include eight Central European countries in 2004 had a major impact, resulting in new opportunities for accessing environmental finance – both private and public – by the new EU member states. Progress has been made in strengthening national institutions, in part through the EU enlargement process.

8. EU expansion has shifted the focus of the EfE process ‘south and east’ towards EECCA and SEE. It is increasingly important to recognize the need for differentiated approaches to the different parts of the region. The new EU neighbourhood policy provides new opportunities for enhanced transboundary environmental cooperation. However, not all countries are equally able to benefit from these opportunities due to differences in their fiscal positions and levels of administrative capacity for environmental management. The international community can help by targeting assistance where it is most needed, by linking it more closely to the progress in reform processes, and by channelling additional finance, which can play a catalytic role alongside domestic resources. The EC has an important role in financing environmental improvements in SEE due to the central importance of the EU accession process, which has broadened to encompass Croatia and the Former Yugoslav Republic of Macedonia since the Kiev conference.

9. The economic recovery of most EECCA countries since the financial crisis at the end of the 1990s has created the prospect of increased domestic financial resources for the environment. In oil and gas rich middle-income EECCA countries (Azerbaijan, Kazakhstan, Russian Federation) significant budget surpluses caused by increased oil prices have shifted the challenge

towards laying a solid foundation for sustainable development. The low-income EECCA countries (i.e. the rest of the Caucasus and Central Asia) face specific challenges, with no EU accession incentive.

10. Perhaps the most profound environmental impact since the Kiev ministerial conference has been caused by the dramatic increase in the price of fossil fuels, mainly internationally traded oil and gas. Augmented by the political dimension of international energy trade, this has put energy efficiency and renewable energy sources at the top of government and business agendas. Environment agencies have a great opportunity to support these new priorities with concrete measures, such as national support schemes for renewable energy sources that have been set up in EU member states. Five main forms of national support schemes for renewable energy sources have been used: (i) guaranteed feed-in tariffs and mandatory buy-back obligations; (ii) renewables certificates, usually coupled with take-in obligations; (iii) public bidding systems; (iv) tax relief or exemptions; and (v) direct support to investments.

III. THE ROLE OF DOMESTIC FINANCE

A. Public domestic finance

11. Domestic finance, both public and private, will remain the major source of environmental finance in EECCA and SEE beyond 2007. Public finance will continue to play a vital role in providing environmental services that will bring significant public benefits, such as water resource management, biodiversity, or municipal environmental infrastructure. EECCA and SEE governments need to create appropriate frameworks for optimising the use of available public environmental expenditure. A number of countries have followed the experience of OECD and CEE countries and have started to improve the efficiency of allocation of public budgets through formalising requirements for medium-term expenditure (or budget) frameworks (MTEFs or MTBFs) at the municipal level (e.g. Ukraine) or at the national level (e.g. Albania, Armenia, Croatia, Kazakhstan, Moldova, Montenegro, Russian Federation, Serbia and the UN Interim Administration in Kosovo). In SEE the mainstreaming of environmental expenditures into wider economic development strategies is happening as part of the EU accession project.

12. Processes such as these offer opportunities for environmental agencies to introduce strategic environmental investments into priorities supported by general budgets (see Box 1) and to ensure more predictable budget allocations for large-scale environmental investments, which require several years to prepare and implement. However, it also poses a challenge for Environment Ministries to compete effectively with other sectors for limited fiscal space and cooperate effectively with Ministries of Finance. Environment Ministries and agencies could improve their technical skills to prepare high quality investment programmes and prioritize projects within these programmes. The OECD *Draft Council Recommendation on Good Practices for Public Environmental Expenditure Management* (OECD, 2006) provides useful guidance in this respect.

13. Some low income countries (e.g. Georgia) have successfully mainstreamed environment into national budget priorities through the national Poverty Reduction Strategy Paper (PRSP). Poverty Reduction Strategy Credits offer concrete implementation and funding arrangements for

these priorities. In SEE the Priority Environmental Investment Programme for South Eastern Europe has been developed and is under implementation⁹. This Programme has assisted Environment Ministries in selecting priority environmental investments and in facilitating their financing. It also helped the donor community to target their financial assistance to the region more effectively.

Box 1: Medium-term budget (expenditure) frameworks

MTEF is an institutional mechanism that represents a complete logical chain linking policy formulations, planning and budgeting, and complements the short-term perspective of annual budget formulation. It contributes to greater fiscal discipline and efficiency in resource allocation and in operation. It ensures that budget allocations are consistent with government policy and strategic prioritization, given the availability of resources. It represents a fundamental shift away from ad hoc lists of project ideas towards a model which facilitates realistic and affordable investment programmes supported by strategic targeting of limited public funds. In Armenia, the MTEF gives prominence to sectors, which are identified in the Poverty Reduction Strategy Paper, excluding environment. The OECD/EAP Task Force has nevertheless supported the efforts of the State Committee in charge of water to design a Financing Strategy for water supply and sanitation, and to integrate this into the new budget process¹⁰. Major outcomes of the project are a consensus on realistic infrastructure targets, more objective discussion of tariff policy, reflection on realism of social and environmental objectives, and opportunities to improve dialogue with the Ministry of Finance and incorporate the results into the MTEF and PRSP. The World Bank has provided technical assistance and guidance to facilitate MTBFs in Tajikistan and Ukraine.

14. Central environmental agencies also face challenges in supporting the devolution of responsibilities for provision of local environmental infrastructure and management of environmental resources to local governments and to regional institutions. Devolving responsibilities to the local level must correspond with fair revenue sharing between central and local level and some fiscal autonomy of local governments. It is in the interests of Environment Ministries to support these reforms, which facilitate predictable revenues and access to adequate debt finance on private capital markets. National governments can also create incentives for local governments to allocate a fair share of local budgets for environmental investments. Box 2 illustrates some examples of environmental intergovernmental transfers from EECCA countries.

⁹ Targeting the Environmental Investment Challenge in South Eastern Europe, REC, 2005

¹⁰ Implementation of a National Financing Strategy for the Water Supply and Sanitation Sector in Armenia (Task 1), OECD, 2007.

Box 2: Intergovernmental transfers to finance environmental investment - lessons from EECCA country case studies¹¹

Intergovernmental transfers are instruments that central governments can use to improve the performance and control of sub-national public expenditure, and to create incentives for better coherence between national and local public policies. The impact of intergovernmental grants on efficiency, fiscal discipline and equity largely depends on their design. Important lessons have also been learnt from EU accession countries where intergovernmental transfers are a key dimension of relations between levels of government and a major source of finance for local jurisdictions. EECCA countries mostly rely on intergovernmental transfers to bridge the financial gap that arises between the costs of local policies and services and the revenues to which local authorities have access. In EECCA countries, general purpose transfers, typically in the form of equalization schemes, are frequently used but can have negative consequences by enabling local budgets to increase their expenditure without raising additional tax revenues.

15. Most local governments in the region still have room to mobilise affordable financing from the users of environmental infrastructure. Water and sanitation services are, on average, affordable at present even in low-income countries in the region. Among the countries studied by the World Bank¹² the average household's bill for these services exceeded 3 per cent of its income only in Moldova and Kazakhstan. Average affordability indicators disregard income distribution, thereby concealing the affordability of water and sanitation to the poorest and most vulnerable groups. Affordability is based on current, low service levels, and there is a vicious circle of low prices and low quality services. Although the room for affordable tariff increase is much larger than commonly believed, the costs of investment needed to bring water and sanitation services up to the level of sustainable access is likely to pose a burden on household budgets, especially poorer ones.

16. Tariffs for environment-related utilities such as water and sanitation need to be set at levels commensurate with service delivery, and which ensure affordability and financial sustainability. The most vulnerable population groups who cannot afford the services must be identified and covered by effective but cost-efficient social safety nets¹³. These reforms require sophisticated institutions and strong fiscal systems to provide reliable social protection. Smart investment planning and financing strategies can address fiscal and poverty constraints to infrastructure investments. Affordability constraints could also be addressed through economies of scale by developing larger, regional investments instead of large numbers of small, localized infrastructure projects.

B. The role of the private sector

17. At the 2003 Kiev Ministerial Conference Ministers recognized the potentially important role of the private sector in mobilizing finance for environmental objectives. There is a wide range of different types of private sector actors that could potentially play a role in environmental financing. These include users of environmental infrastructure, domestic

¹¹ Intergovernmental Transfers for Environmental Infrastructure. Lessons from Armenia, the Russian Federation and Ukraine, OECD, 2006.

¹² Monitoring what Matters, World Bank, 2007.

¹³ [Financing Water Supply and Sanitation in Eastern Europe, Caucasus and Central Asia](#), OECD, 2006.

operators of environmental infrastructure services, polluting industries and, last but not least, financial intermediaries including banks, investment funds, insurance companies, pension funds and other carriers of long-term finance¹⁴.

18. Effective public policies can play an important role in mobilising private environmental expenditure. In mature democracies and markets, government financial support for polluters to reduce pollution to legally binding standards has proved to be bad for the environment and the economy in the long run. The ‘polluter pays’ principle was therefore widely agreed as the cornerstone of environmental policies in OECD and EU countries. As EECCA and SEE countries continue to develop modern political and market systems, public expenditure will play a decreasing role in achieving environmental improvements, except in providing environmental infrastructure and in managing common natural resources. The experience of industrialised OECD countries and the more recent experience of new EU members show that creating the right incentives for the private sector can help achieve environmental improvements without placing a burden on public budgets. These include aligning environmental standards (both quality and emissions) with good international practice, and reforming environmental permitting to make it more effective and enforceable (but also fair and investment-friendly). Box 3 provides some examples of private sector involvement in water infrastructure investments.

Box 3: Private sector involvement in water infrastructure investments

Hopes for greater private sector participation in financing the water sector in EECCA have not been realised in recent years. International operators have become more risk averse, in part because of uncertainties about the legal and political framework. Most prefer relatively low-risk options such as management contracts as a first step, rather than actual investments.

The Russian Federation and Armenia are exceptions. Following positive political signals, domestic private companies had established contracts in twenty cities by September 2004, supplying water to about 11 per cent of the urban population. However, most of these contracts are short-term leases, and the sustainability of their involvement in the water sector is unclear. In Armenia, the establishment of management and lease contracts with international private operators, which cover almost all major cities, is perceived to have supported the reform process, and helped to attract significant resources from the donor community. Hence the experience from the water sector shows that even if the private sector is not directly providing finance for environmental infrastructure, its involvement in the management of such infrastructure may still help to attract resources from other sources.

19. The European regulatory system can serve as a reference for environmental permits that are integrated and derived from environmental performance benchmarks. These permits are less cumbersome and more transparent to issue, and easier to enforce than existing systems in EECCA and SEE countries¹⁵. They also encourage continuous improvement of environmental performance by enterprises and prevent or minimize pollution. Economic instruments such as environmental taxes or emissions trading can be applied to alter the behaviour of polluters (see Box 4). In some countries Ministries of Environment may face difficult challenges in decreasing the present excessive reliance on the use of economic instruments (mainly pollution fees) and non-compliance fines for revenue raising purposes. This could result in environmental agencies being perceived as rent seekers rather than providers of public goods, and the diversion of

¹⁴ OECD Global Forum on Sustainable Development “[Public-Private Partnerships in Water Supply and Sanitation – Recent Trends and New Opportunities](#)”, Paris, France, 2006.

¹⁵ Integrated Environmental Permitting Guidelines for EECCA Countries, OECD, 2005.

institutional capacity away from the effective implementation of economic instruments such as permitting. In SEE application of economic instruments might successfully support the achievement of environmental priorities. For example, in Croatia the Environmental Protection and Energy Efficiency Fund obtain revenues from certain environmental fees and charges.

20. According to international good practice, public funds can provide efficient financial incentives to enterprises if they are used to encourage the improvement of environmental performance beyond legal minimum standards and beyond standard business practice in industry. Governments can also provide cost-effective support to pollution abatement by focusing on investment aid to collective treatment infrastructure (e.g. collective waste and wastewater treatment facilities), in particular to small and medium-sized enterprises. Operational and maintenance and, ideally, investment costs should be recovered from users of such infrastructure in order to ensure its sustainability.

21. As shown in Box 3, the main contribution of the private sector to environmental infrastructure such as water and sanitation in EECCA and SEE countries has been more efficient operation rather than capital. Finance and expertise from the private sector will only flow freely where the climate is attractive and investment (including transaction) costs can be recovered, and where the regulatory framework is predictable. Governments could improve the climate for private sector involvement by developing a clear legal basis and procedures for establishing and managing public-private partnerships, drawing from good and bad lessons learned so far. The experience of CEE countries also shows that municipal infrastructure can be efficiently managed by public utilities providing that they are corporatized and financially and operationally autonomous.

Box 4: Lessons learned from the use of economic instruments of environmental policy

In EECCA countries environmental fees do not always fulfil their functions properly. There are too many fee titles to be managed efficiently and calculated properly (e.g. fees covering 1,217 different air pollutants and 1,345 water pollutants respectively, in Kazakhstan alone). In OECD countries incentive pollution fees are usually targeted at one or two pollutants and rarely earmarked for environmental funds (e.g. NO_x and SO₂ taxes in Scandinavian countries). Such fees do not provide effective incentives to reduce pollution, notwithstanding relatively high rates. Calculation of payments due is non-transparent and discretionary. These features turn environmental fees primarily into a tool for government officials to extract rents from industry. Enterprises perceive them as such and as an opportunity for corruption. They are an inefficient fiscal instrument to raise insignificant revenues for local budgets and need to be drastically streamlined. Most of the several thousand emissions fees could be abolished without any serious damage to the environment or to public revenue.

22. State/donor intervention and assistance can also support private sector participation by facilitating access to credit. This can be done through credit enhancement schemes, support for specialized municipal relationship banking, or well designed lines of credit or co-financing schemes. Options for making use of local capital markets to finance environmental infrastructure also include enabling the proponents of small projects, for example small municipalities and community groups, to bundle their projects in order to be more palatable to capital markets.

23. The Kyoto Protocol to the Convention on Climate Change provides a range of opportunities to finance the abatement of greenhouse gas (GHG) emissions. Flexible, project-based mechanisms, such as Joint Implementation (JI) and the Clean Development Mechanism (CDM), channel foreign funds directly into GHG reducing projects. Host enterprises acquire the necessary funds partly upfront to undertake projects and partly after verified emissions reductions are achieved, while an investor receives the resulting GHG reduction credits. These project-based mechanisms already have well-established global markets. This represents a new and vast opportunity for most EECCA economies, which are carbon intensive. However, this market is competitive and adequate institutions have to be set up immediately.

Box 5: Energy service companies: a mechanism to harness private sector expertise to boost energy efficiency

Governments can also facilitate development of specialised project management companies such as energy service companies (ESCOs) in order to enhance the bankability and technical feasibility of energy efficiency projects owned by inexperienced and small project owners. ESCOs have been widely supported by the World Bank and the European Bank for Reconstruction and Development (EBRD) as a business model for bridging the gap between end-users and financing. It involves private sector participation and financing, allows technical risks to be transferred away from end-users and financiers, and includes inherent business incentives for ESCOs to develop projects proactively. ESCOs can also specialize in packaging smaller energy efficiency projects, bundling procurement of goods across several projects and taking on project performance and credit risks. Despite promising attributes, creating strong and credible ESCOs, not to mention full ESCO markets, has proven very challenging. Countries often lack the legal and financial infrastructure to adapt to and support such business models. New ESCOs often lack the proper skills (corporate management, financial management and credit assessments, risk mitigation and management, sales) and thus have limited credibility to potential customers and financiers. EECCA and SEE countries often have limited equity markets and investors willing to create new companies and test new business types. Low energy prices are also a key barrier.

24. There are significant opportunities in EECCA and SEE countries to follow successful examples from around the world of harnessing private sector finance to provide certain public environmental goods and services, such as watershed and biodiversity protection. In order to realize these opportunities governments must create conditions for the private sector actors to capture private gains or make a business case for protecting public environmental resources. Government regulatory interventions can trigger revenues to private sector from biodiversity-friendly agriculture, tourism (particularly in coastal areas), or managing wetlands to protect quantity and quality of water bodies used for recreation, or drinking. Innovative, low cost solutions to environmental problems, for example non-conventional technologies for wastewater treatment through ecosystem management, should be given due consideration also by the donor funded environmental investment support facilities, especially in low-income countries where extensive infrastructure (e.g. pipes, pumps and waste water treatment plants) may be unaffordable.

25. While accumulated industrial pollution is often a public liability (due to former state ownership of most industrial sites, unclear privatization arrangements, and abandonment of sites), ongoing pollution, in contrast, is mostly perceived as a responsibility of the private sector. Governments face the challenge of enforcing this responsibility from rapidly growing industries amid opposition of powerful interest groups including those concerned about social impacts such

as short-term job losses. Innovation and courage will be needed from environmental agencies to design and implement policies, which effectively protect the environment, while being neutral to public budgets and friendly to investments and markets. OECD and CEE industrialized countries offer a number of positive experiences with using policy incentives to involve private enterprises, specifically polluting industries, in improving environmental performance including clean-up of environmental legacies as part of privatization (see Box 6).

Box 6: Policy incentives to encourage brownfield clean-up and recycling and to facilitate ongoing pollution abatement by industry

Contaminated sites deter investors from land development because of the associated clean-up costs. Developers may shy away from properties believed to be contaminated for fear of *future* liability and because *immediate* clean-up costs may prove too high for the development project to be viable. Lenders may also withhold financing for brownfield projects to avoid involvement in liability at the site, and/or undervalue the property as collateral for the loan. In particular, the privatization of state owned enterprises is more efficient if liabilities for past pollution are known to both parties, and responsibility for clean-up is clearly specified and allocated. Once it is done, policies to encourage the financing of brownfield remediation may consist of: (a) liability relief; (b) direct financial incentives; (c) regulatory relief, in the form of fast-track approvals of plans and flexible cleanup standards; and (d) insurance against liability.

26. Polluters will reduce ongoing pollution without subsidies only if induced by environmental policy instruments, by public pressures or by trade partners. The regulatory environment must provide incentives to industry to apply best available techniques (BAT) that avoid and minimize the environmental impacts. Correcting the incentive structure may require the modernization of the regulatory framework. Environmental permitting would need to move to an approach based on BAT, improvements in monitoring, including self-monitoring, a modern environmental liability regime, financial sanctions that are streamlined and fair, but deterrent and tightly enforced, and a number of environmental fees need to be drastically reduced with parallel strengthening of their incentive functions.

27. In Central and Eastern Europe the Environmental Compliance and Enforcement Network for Accession (ECENA) has played an important role in facilitating the enforcement of environmental standards. It is an informal network of environmental authorities from the pre-candidate, candidate and accession countries. Its main objective is to support its members in strengthening environmental compliance and enforcement in line with the EU obligations. Its multi-annual work programmes have helped member counties to increase their capacity for the implementation of EU legislation.

28. Domestic private investment can be boosted by foreign direct investment (FDI). FDI can help to improve the environmental performance of industrial enterprises. Guidance in this area has been developed by the OECD, for example the environment chapter of the *Guidelines for Multinational Enterprises*¹⁶, and the analysis of technology transfer schemes. Some countries may be able to improve the climate for private investment in the environment through adopting appropriate regulatory frameworks.

¹⁶ [OECD Guidelines for Multinational Enterprises](#), OECD, 2000.

IV. THE ROLE OF INTERNATIONAL FINANCE

A. The need for sustained official development assistance for the environment

29. There are strong reasons for continuing international financial assistance for the environment in EECCA and SEE. Official development assistance can play a catalytic role in the overall provision of environmental finance. There is a strong link between the environment and poverty reduction agendas, for example through the Millennium Development Goals and the environment-health nexus. The emergence of a new European neighbourhood policy is creating new opportunities for effective transboundary environmental cooperation beyond the borders of the EU. The state of the environment is also highly relevant to the regional security agenda through a range of issues including environmental migrants and transboundary environmental hazards.

30. International financial assistance for the environment is primarily delivered in the form of grants and loans (both concessional and non-concessional) from bilateral donors, multilateral donors, IFIs and specific funding mechanisms such as the Global Environment Facility (GEF) and the Kyoto Protocol mechanisms. Grants may be provided by donor governments, environmental foundations, non-governmental organisations (NGOs) and multinational corporations. They may be channelled through bilateral donor programmes whereby specific projects are selected through a negotiation process with national governments, local government or NGOs. Alternatively, it may be delivered through donor mechanisms established to support projects in a specific region or sector. These mechanisms are often established by a group of donors on a multilateral basis, for example the GEF.

31. Loan finance is made available by IFIs and multinational and national banks. Some donor governments (e.g. Germany, Japan) also have bilateral lending loan programmes. Loans are provided under specific contractually agreed repayment terms, which may differ according to interest rate, maturity period, grace period and security/guarantee requirements. Environmental grants tend to be used to finance technical assistance and institution-building activities, although they can play a very important role in supporting environmental investment projects through financing a proportion of capital expenditure or project preparation activities. Conversely, loans are typically used to finance larger infrastructure projects. Debt-for-environment-swaps are providing a new alternative source of international environmental finance in countries which are heavily indebted to members of the Paris Club (such as Georgia and Kyrgyz Republic). They can increase the level of resources available for environmental expenditures, although the opportunities and risks that they present need to be carefully analysed before launching such schemes¹⁷.

32. The priorities and approaches of donors and IFIs in the EECCA and SEE regions have evolved somewhat since the Kiev conference in 2003. As shown in the *Trends in Environmental Finance* report prepared by the EAP Task Force (OECD, 2007), bilateral donors are progressively scaling down their programmes in the region (from USD 200 million in 2001 to

¹⁷ [Pre-feasibility Study for Debt-for-Environment Swap in the Kyrgyz Republic](#), OECD, 2005; [Debt-for-Environment Swap in Georgia: Pre-feasibility Analysis, Institutional Options and Potential Project Pipelines](#), OECD, 2006.

less than USD 100 million in 2005), while IFIs have increased their assistance in the form of loans from some USD 250 million in 2001 to USD 450 million in 2005). Donors have also made important progress in developing more coordinated and strategic ways of working together, for example through multi-donor initiatives such as the EBRD's Early Transition Countries Initiative. Some of these have an explicit environmental focus, for example the Northern Dimension Environmental Partnership (NDEP) and the Danube and Black Sea Task Force (DABLAS). In SEE the Regional Environmental Reconstruction Programme (REReP) has played an important role in facilitating donor assistance based on the needs of SEE countries.

33. Donors are also using a range of new aid instruments, including budgetary support, in addition to the more traditional project-based approach. The shift towards budgetary support has implications for how international aid is channelled into the environment sector as recipient countries have more say in how aid expenditure is allocated between sectors. Therefore, it is especially important to ensure that environmental priorities are clearly reflected in national expenditure frameworks in such cases, as discussed in paragraph 11 of this paper.

B. Optimizing the use of international assistance

34. There needs to be better coherence between national environmental expenditure and international environmental assistance. One option is the use of Poverty Reduction Strategy Papers, and associated medium-term expenditure frameworks, to provide this coherence by enabling donors and IFIs to plan their assistance around country-led approaches that explicitly set out national priorities, including the environment. Under the new EC assistance instruments, such as the Instrument for Pre-Accession Assistance (IPA), European Neighbourhood Partnership Instrument and the Development Cooperation and Economic Cooperation Instrument, EC environmental assistance will increasingly be channelled through national programmes, so environmental investment projects will need to be linked to national priorities in order to access EC grant financing.

35. Alongside the alignment of international assistance with national expenditure priorities, international assistance can also be used to provide incentives for environmental improvements and reforms (see Box 7). For example, the World Bank has developed client-executed grants and lending instruments with results-oriented disbursements, including Development Policy Loans with environmental performance indicators and Poverty Reduction Support Credits. Similarly, the EU's Stabilization and Association process and the associated assistance packages such as IPA in the non-accession countries of SEE have provided powerful incentives for reforms and environmental improvements. Several SEE countries are now in the process of preparing or adopting sustainable development strategies.

Box 7: Output-based aid

Output-based aid (OBA) is the use of explicit, performance-based subsidies to complement or replace user fees. It involves the contracting out of basic service provision (e.g., infrastructure, health, education) to a third party — such as private companies, non-governmental organizations, community-based organizations, and possibly even a public service provider — with subsidy payments tied to the delivery of previously specified outputs (e.g. per network connection, or per kilometer of road constructed or maintained). Governments can also be beneficiaries and receive aid in installments on achieving specific milestones or targets. Examples of possible OBA applications include payment of subsidies tied to:

- (a) number of new connections made, when the goal is to expand access to network services;
- (b) verified household consumption, equivalent to the difference between a life-line tariff (paid for by the household) and the full tariff;
- (c) achievement of positive externalities (e.g. subsidies for sanitation disbursed against the achievement of specific environmental targets).

36. In addition to traditional donor grants and IFIs loans, EECCA and SEE countries require assistance in making the most efficient use of all available sources of international financial assistance for the environment, including multi-donor initiatives such as the Global Environmental Facility and the Northern Dimension Environmental Partnership.

C. Improving conditions for external borrowing for environmental improvements

37. In low-income countries in EECCA and SEE, IFI loans for environmental improvements need to be made more accessible and affordable. In order to achieve this, sustained donor co-financing is necessary and the ratio of grants to loans in EECCA and SEE needs to increase to ensure that loans are more affordable and accessible to poorer countries. As the eventual repayment of IFI loans will come from EECCA and SEE countries' domestic resources, it is important to ensure that investments are phased realistically in a way that takes into account affordability and fiscal constraints. This is particularly important in low-income countries, which have caps on sovereign borrowing set by the International Monetary Fund.

38. In middle-income countries in EECCA and SEE national authorities need to be able to prioritize projects that are appropriate for IFI investment. It is important to bring in technical expertise as part of IFI packages, including support to build local capacity for understanding IFI requirements. For example, it may be necessary to undertake institutional and sector reforms in order to make investments feasible and sustainable. For example, fiscal decentralization can be achieved through policy changes, which in turn enable local governments to borrow directly or offer guarantees for loans to public utilities without the need for a sovereign guarantee. In some cases central governments could consider revising procedures for obtaining sub-sovereign guarantees so that municipalities could, where appropriate, have more direct access to international finance for environmental investments.

39. Further work is needed to find ways of attracting international finance for small projects, including those with a particular developmental or poverty reduction focus. Some options could include developing new opportunities for on-lending arrangements and sub-national borrowing. IFIs should also work with local commercial banks in order to launch credit lines for smaller

infrastructure projects. Lessons should be learned from the experiences of the World Bank and EBRD with the use of credit lines and financial intermediaries, municipal funds and energy service companies (see Box 8). IFIs and donors should aim to coordinate the terms and conditions of the credit lines they support, and work towards harmonizing them¹⁸.

Box 8: Lessons learned from the World Bank and EBRD experience with targeted credit lines

The use of lines of credit (LOC) by the World Bank has declined sharply over the budgetary period 1993-2003, accounting for only 2 per cent of total World Bank investment lending by 2003. The decline has been across all regions and all sectors. Cancellation of original commitments has been high, and outcomes of closed LOC have been poor. Given this difficult history, the need for credit lines targeted at environmental investments should be carefully considered on a case by case basis. If deemed necessary to achieve specific environmental objectives, they should be carefully designed taking into account lessons learned from international experience. Better outcomes of LOC are associated with stable macroeconomic conditions in a country, stronger financial sectors, and limited state ownership of financial institutions, use of clear eligibility criteria in the selection of financial intermediaries, and use of only private sector financial intermediaries.

The EBRD has had greater success in working through financial intermediaries. In many cases it has run technical cooperation programmes utilizing donor funds to hire specialist advisers and provide financial and environmental training to financial intermediaries so that they can develop swift lending procedures for small business clients. As local banks grow more confident about lending to micro and small businesses, they may begin to supplement IFI credit lines with their own funds. However this type of programme can require a lead time of at least two years to equip local banks with the management skills and support mechanism necessary for developing loan portfolios. The EBRD has also run a number of dedicated energy efficiency credit lines, which started in Bulgaria and are now being rolled out in Georgia, Romania, Russia and Slovak Republic.

V. THE NEED FOR EFFECTIVE PROJECT PREPARATION

40. The availability of well-developed, viable environmental project concepts can be a bottleneck to environmental investment, even when finance is available. Effective project preparation is essential for accessing environmental finance from public, private and international sources, and for balancing the supply and demand of finance. For example, feasibility studies are often focused on technical aspects of project preparation rather than financial and economic aspects, which will ultimately reduce the likelihood of developing a bankable project.

41. The burden of project preparation, particularly on lower-income countries, should be reduced by implementing lower-cost and more streamlined approaches that are appropriate to the needs of EECCA and SEE countries, while maintaining quality standards. Project design should avoid oversized investment proposals and unrealistic business models. Greater attention is needed to develop cost-effective project preparation for smaller projects. Options could include innovative project design and bundling smaller projects into larger, more bankable ones.

¹⁸ OED Review of Bank Lending for Lines of Credit, World Bank, 2004

42. Strengthening capacity for project preparation in EECCA and SEE is a priority. Project proponents, including national and sub-national authorities and the private sector, need to be able to coordinate and prioritise the identification and development of environmental investment projects. The Municipal Development Fund in Georgia provides a good example of how this can be achieved. The Fund is a legal entity, established in 1997 with World Bank funding and designated by the Georgian Government as the centralised project management unit for all water and wastewater projects. It interacts closely with the local water companies and cities. In Croatia capacity for project preparation has been enhanced by development of the ISPA strategy and IPA lists. The Croatian national ISPA environmental strategy includes priority projects for ISPA co-financing in waste, water and air pollution management. The list of projects was prioritised and selected projects were identified as those requiring early implementation.

43. International support for environmental project preparation will continue to be necessary, especially in the lower-income countries of the Caucasus, Central Asia and Western Balkans. Capacity building should be a primary objective of this support. Lessons should be learned from experiences with the EC's Joint Environment Programme (JEP) I and II, and from the current suite of investment support facilities, also funded by the EC. There are important opportunities to harness the transition experience and technical capacity of the new EU member states and apply these in EECCA and SEE countries. The "Environment for Europe" process could continue to play an important role in coordinating international assistance for project preparation beyond 2007.

44. Foreign assistance alone will not strengthen local capacity for project preparation. Priorities for supporting effective project preparation could include the following:

- (a) *Encouraging appropriate institutional reforms.* For example, in the water and sanitation sectors it may be appropriate to create financially viable public utilities that are autonomous of municipal authorities. In this way utilities are subject to more rigorous fiscal discipline and are incentivized to develop specialized technical expertise and project management capabilities. In some countries the roles of different ministries (for example Ministries of Environment, Ministries of Finance, etc.) with respect to project preparation should be made clear.
- (b) *Building capacity for project preparation through client involvement in project design and implementation.* Rather than being regarded as a stand-alone activity, capacity building should be mainstreamed into the process of developing and implementing environmental investment projects. Technical assistance and support for institutional reforms should be integrated into the project process so that client institutions are left with enhanced technical expertise and project management capabilities that will enable them to take forward further environmental projects in the future. For example, the EBRD routinely includes Corporate Development Support Programmes for water utilities as part of its investment projects in the water and sanitation sector, and also offers free energy audits for projects with the potential for large energy efficiency improvements.
- (c) *Building up the pool of local consultancy capacity.* Capacity for project preparation does not only need to exist in the public sector – an experienced and appropriately skilled local private sector, able to provide high-quality consultancy services, is

also important. IFIs and donors should make full use of available local expertise by involving local consultants in the project process where appropriate, thereby enabling the transfer of expertise and exposing local consultants to international best practice. An example of how international support can boost local consultancy capacity is provided by some of the EC's investment support facilities. For example, the EC Tacis-funded Water Investment Support Facility has made extensive use of local consultants in feasibility studies for a number of water and sanitation investment projects.

Abbreviations and acronyms

BAT	Best available techniques
CEE	Central and Eastern Europe
EAP	Environmental Action Programme for Central and Eastern Europe, Caucasus and Central Asia
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EECCA	Eastern Europe, Caucasus and Central Asia
EfE	Environment for Europe
ESCO	Energy service company
EU	European Union
FDI	Foreign direct investment
GDP	Gross domestic product
GEF	Global Environmental Facility
GHG	Greenhouse gas emissions
IFI	International financial institution
IPA	Instrument for Pre-Accession Assistance
ISPA	Instrument for Structural Policies for Pre-Accession
JI	Joint Implementation
LOC	Lines of credit
MDG	Millennium Development Goal
MTBF	Medium-term budget framework
MTEF	Medium-term expenditure framework
NGO	Non-governmental organisation
NO _x	Oxides of nitrogen
OBA	Output-based aid
OECD	Organisation for Economic Cooperation and Development
PRSP	Poverty Reduction Strategy Paper
REC	Regional Environment Center
SEE	South Eastern Europe
SO ₂	Sulphur dioxide
UN	United Nations
