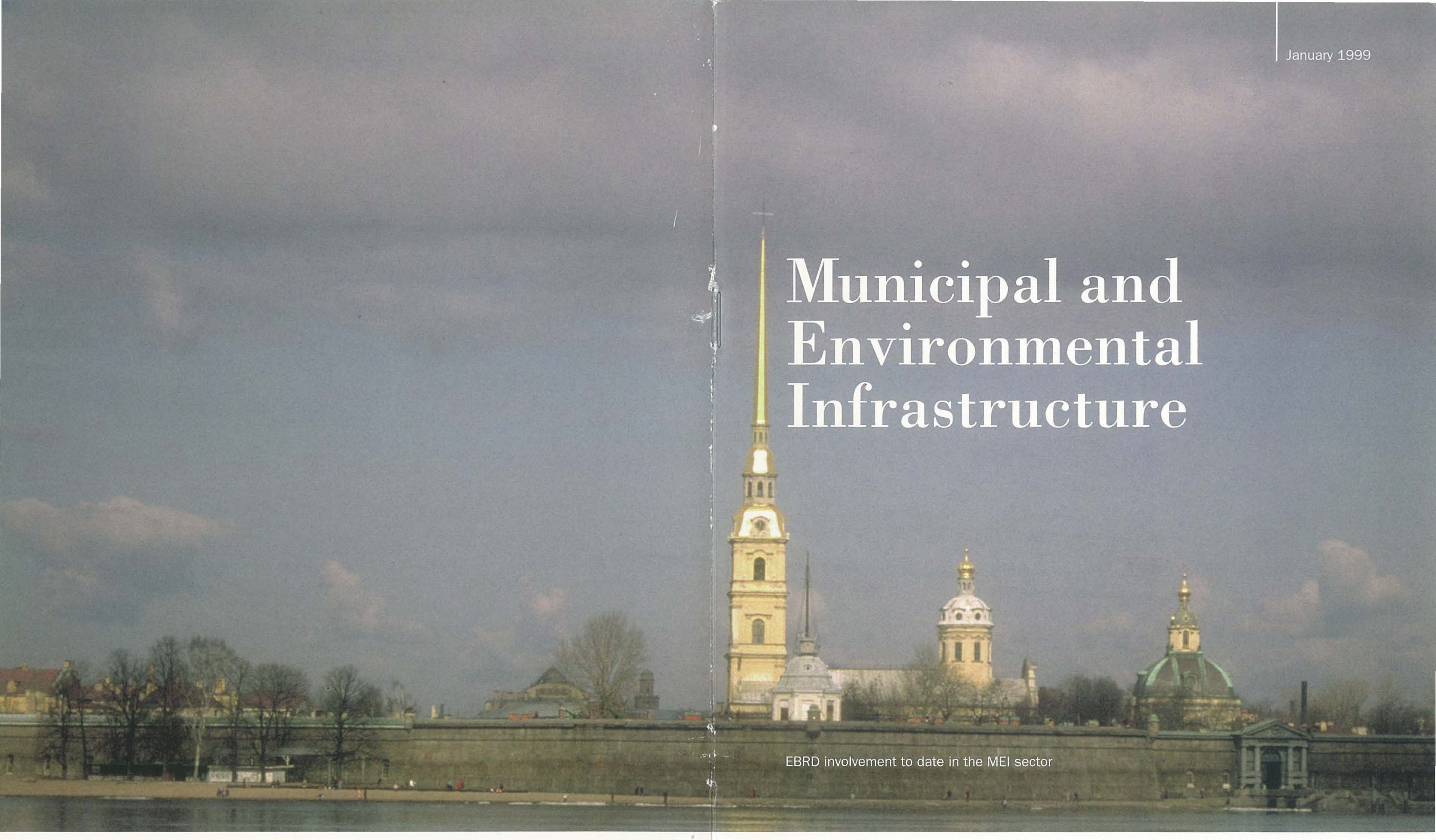
January 1999

Municipal and Environmental Infrastructure

EBRD involvement to date in the MEI sector



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Contents

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Introduction

The European Bank for Reconstruction and Development (EBRD) is committed to improving municipal and environmental services in its countries of operations,[1] in line with its mandate to promote environmentally sound projects. Over €750 million had been committed by the EBRD in the municipal and environmental infrastructure (MEI) sector as of January 1999, supporting overall investments of approximately €2 billion across more than 80 municipalities in 12 countries. In addition, the Bank has investment projects under preparation and review for which EBRD financing totalling over €1.4 billion has been requested. The EBRD has provided this financing in a variety of forms, including sovereign and non-sovereign public sector loans, limited and non-recourse project funding involving private companies or public-private partnerships, and equity.

At the EBRD, the MEI sector covers direct revenue-earning services, such as water supply, waste-water collection and treatment, solid waste management, district heating, natural gas distribution and urban public transport. Infrastructure, such as urban roads, and environmental clean-up operations, which are not directly revenue-earning, are also included. Generally, the provision, financing and management of these municipal and environmental services are the responsibility of local or regional governments. The MEI sector also covers environmental services, such as industrial and hazardous waste management, that may be organised nationally or outside local government responsibility.

Recent developments

The former command economies of central and eastern Europe, the Baltics and the Commonwealth of Independent States (CIS) left the MEI sector with a legacy of:

- environmental degradation
- an insufficient provision of essential municipal infrastructure and services
- inadequate financial performance and significant inefficiency in service provision
- deteriorating facilities and equipment due to under-investment in maintenance and replacement.

Investment is urgently required in the region to tackle this legacy, to improve living conditions and to upgrade an inadequate infrastructure. Areas in particular need of financing include water supply, waste-water collection and treatment, solid waste management, district heating, natural gas distribution and urban public transport.

Since the start of the transition process, a number of changes resulting partly from political and economic reforms have had a significant impact on the provision of

[1] Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Former Yugoslav Republic of Macedonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, Russian Federation, Slovak Republic, Slovenia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

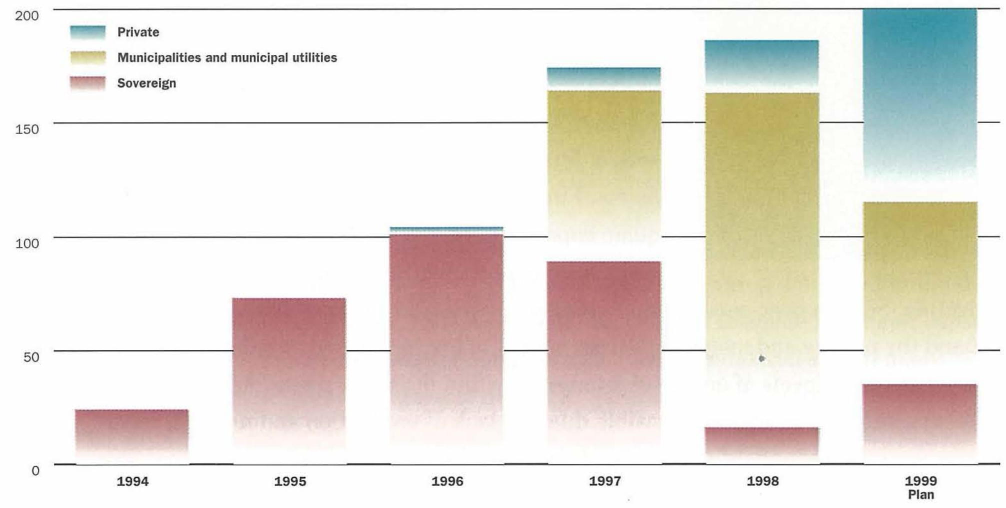
municipal infrastructure and services. These developments include:

- decentralisation of municipal infrastructure and services
- reform of the system through which local government in general, and municipal infrastructure in particular, are financed
- rapidly emerging municipal interest in private involvement in the MEI sector
- European Union (EU) accession.

EBRD involvement to date in the MEI sector

The EBRD has responded flexibly to the changing demand for MEI sector investment funds. Virtually all EBRD financing for municipal projects was provided on a sovereign basis until the end of 1996. This trend changed in 1997 when, in response to market demand, the share of private and non-sovereign municipal investments increased considerably, rising to over 40 per cent, compared with only 4 per cent in 1996. This turnaround is even more pronounced in the project pipeline: of municipal projects currently under preparation, well over 90 per cent are private and non-sovereign public.

EBRD financing commitments and project pipeline in the MEI sector 1994-99 (€ million)



Reform requirements and investment needs

The decrease in the share of sovereign operations has been accompanied by a concentration of activities in advanced transition economies and in countries seeking EU accession, where demand for private and non-sovereign municipal financing by the EBRD is growing rapidly.

Water supply and waste-water treatment

Water supply systems include raw water intakes, groundwater extraction and transmission pipes, drinking water treatment (purification) plants and transmission pipes, and water distribution networks (including pumping plant, storage reservoirs, etc.) Waste-water systems include the sewerage network, pumping plant, reservoirs and waste-water treatment plants.

In many cities throughout the EBRD's countries of operations, water supply and waste-water infrastructure is in a poor state of repair due to prolonged under-investment in maintenance and asset renewal, which has led to inadequate service quality and environmental pollution. In water supply, problems are most pressing in the CIS countries and several intermediate transition economies, where it is not uncommon for cities to have intermittent or rationed water supply. On the waste-water side, there is a widespread problem, in all countries in the region, of inadequate or non-existent collection and treatment of sewage.

Generally, the operational and financial performance of municipal water and sewerage companies is poor, revenue generation is inadequate and services are not provided in an efficient and cost-effective way. Many of the present publicly operated systems are marked by wastage of resources, high levels of physical losses and lack of financial rationale in operations and investments. Financial performance is hampered by inadequate capacity in revenue administration, financial management, and investment programming and budgeting. Serious over-consumption of water services has followed failure to manage demand (by pricing and metering). Underpricing of energy has led to inefficient system designs and high levels of energy consumption within the water sector. Adequate operational management is often not feasible due to a lack of production and network water meters, telecontrols and information systems.

Municipal and Environmental Infrastructure

While, in most of the advanced and some of the intermediate transition countries, the principle of economic pricing of water and sewerage services has been accepted politically and publicly, the scope for tariff increases is restricted by economic factors and affordability concerns.

Service levels, enterprise performance and sector reform vary considerably across the region. The EU accession countries[2] and Croatia (which generally aligns its environmental standards with those of the EU) have made progress in improving services and adopting reforms, although considerable problems in service quality and operating efficiency remain. Other countries, particularly the Russian Federation, Ukraine and countries of the Caucasus and Central Asia, suffer from severe problems.

Investment is needed not only to address deficiencies in service quality but also to comply with more stringent and better-enforced water and surface-water pollution standards, particularly in the more advanced transition economies and in EU accession states. Here, investment is required in the rehabilitation, upgrading or construction of waste-water treatment plants and sewage collector networks.

In all countries in the region, investment is needed in network rehabilitation to reduce physical losses in water distribution networks and groundwater intrusion in sewerage systems. Investment is also required to improve the operating efficiency of water and sewerage networks through system reconfiguration, network and consumer metering, replacement of energy-inefficient pumping plant, and the establishment of billing and revenue administration and financial and management information systems.

Solid waste management

Solid waste management systems include the collection, separation, transfer, treatment and disposal of municipal and industrial waste. Disposal facilities include sanitary landfills, incinerators, and recycling and composting plants.

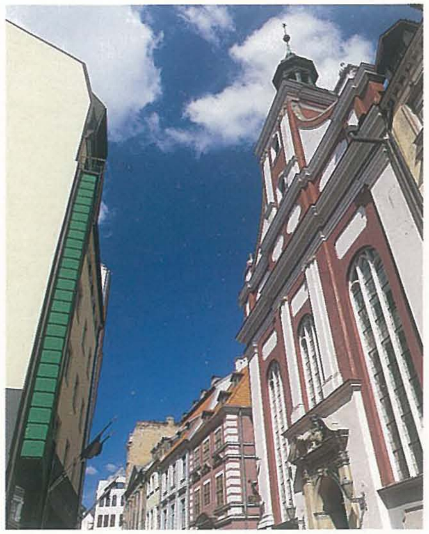
The general problems include poor, infrequent and inefficient collection of waste, absence of waste separation and lack of environmentally safe disposal facilities. Unsatisfactory solid waste disposal in unregulated and unlined landfills is common. Inadequate, or non-existent, treatment of leachate is a major cause of soil, groundwater and surface water contamination. In the industrial sector, many countries face the problem of a stock of untreated hazardous waste awaiting final treatment and disposal. Contaminants from poor hazardous waste disposal, such as heavy

[2] Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic and Slovenia.

metals or toxic chemicals, threaten drinking water supplies. Incinerators, where they exist, are often inefficient and heavy air polluters.

In advanced transition economies the investment needs are mainly in the organisation of waste management systems, including transfer stations, and in ensuring environmentally safe treatment and disposal facilities. In a large number of cities, waste disposal is becoming an acute problem as landfills are nearing the end of their useful life or are environmentally unsafe; investment is required to rehabilitate existing but contaminating landfills as well as to develop new ones. In addition, the total amount of waste produced is expected to increase with economic growth.

In some countries, such as Slovenia, waste incineration, although generally more expensive than environmentally sustainable landfilling, may become mandatory, requiring new incinerators. Some cities, such as Moscow, need to invest in the rehabilitation of existing waste incinerators, making them more effective to meet air emission standards.



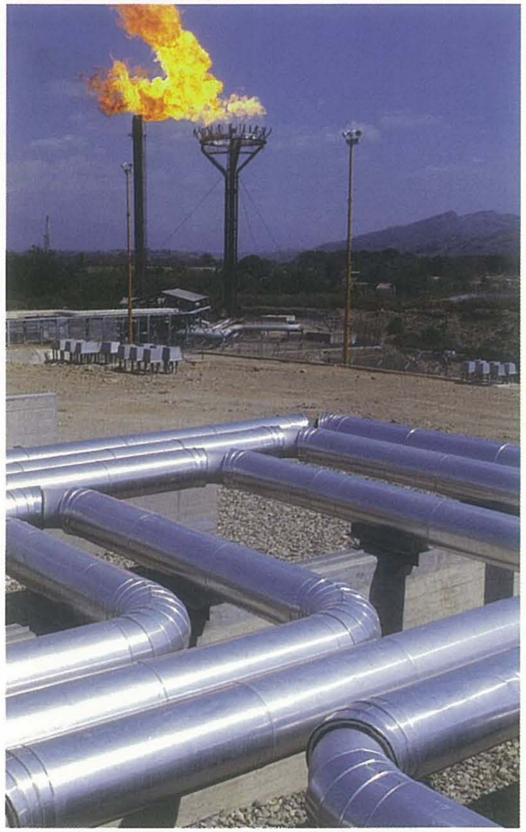
District heating

High energy intensity is a widespread problem, particularly in the CIS and some countries at an intermediate level of transition. One of the major causes of energy wastage is the use of poorly designed and often badly maintained district heating systems, which are also significant sources of air pollution and greenhouse gas emissions. The operating efficiency of utilities generally tends to be low in the absence of economic incentives and clear performance targets. District heating systems have often been designed to maximise delivery of heat at constant flows, regardless of variations in demand, and, as a result, the heat supplied to consumers can be either excessive or unreliable and insufficient. There is potential for substantial energy efficiency gains through price structuring and the application of better operating procedures, such as flow variation and controls.

District heating includes facilities for heat generation, such as combined heat and power plants or boilers, and heat distribution, including primary and secondary networks, heat exchangers, substations, and building control and regulation systems.

In most countries, with the possible exception of some advanced transition economies such as the Czech Republic and Poland, district heating systems are not operated on a full cost-recovery basis; in many countries, tariffs for heat and steam supply are kept at levels below their actual cost of production. Often individual heat consumption is not metered and consumers are not billed for actual consumption. In the countries of the CIS, in particular, there is a widespread problem of low revenue collection and non-cash payment. As a result of under-billing and non-payment by consumers, in many cities district heating utilities generate insufficient cash flow to pay for much-needed investment in system rehabilitation and energy efficiency.

Where it is cost-effective to maintain district heating systems as the main carrier of heat to households, industry and commerce, investment is needed for the modernisation of heat generation facilities, the rehabilitation of distribution networks and the installation of equipment, such as regulation and metering at substations, which will allow more efficient management. Investment is also required for the conversion of boilers from coal to other fuels and, where economically and technically feasible, in combined heat and



power (CHP) plants to meet environmental and public health standards.

Natural gas distribution

The main problem is the virtual absence of gas distribution networks. Investment is often hampered by the high cost of developing entirely new systems and by competition from existing, often subsidised, sources of energy and heat.

In cases where district heating systems have badly deteriorated, or where they rely on expensive sources of heat or serve only part of a city, natural gas can provide an alternative. It has the potential to be supplied competitively in many countries in the region. Under regulatory requirements, competition between different sources of energy and heat is allowed – as is the case in Poland; suppliers have competitive access to transmission networks; and prices can be set at appropriate levels.

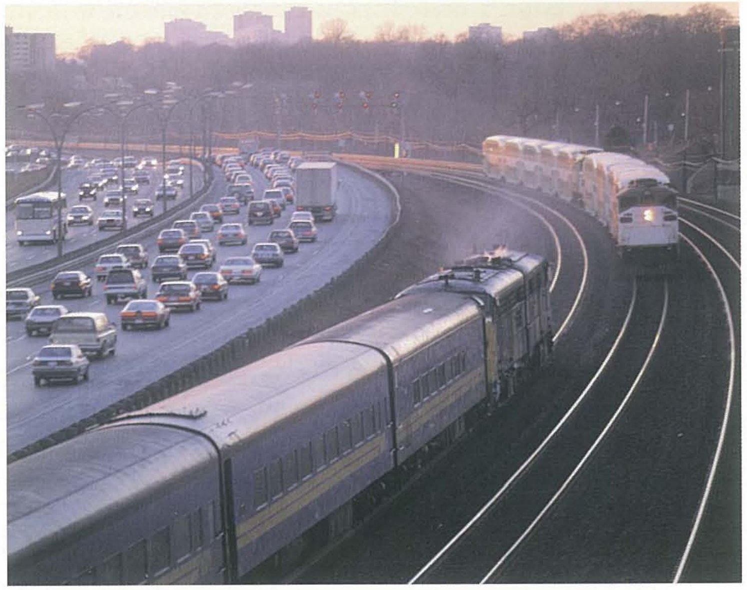
Transport

In many countries, under-investment in maintenance and capital replacement has led to a rapid deterioration of public transport in urban areas. Rolling stock (buses, trams) are often energy-inefficient and polluting. This situation is made worse by a generally low level of cost recovery – although this varies considerably between countries and between cities within a single country. In many places there is a legal requirement for operators to carry specified passenger categories at reduced or zero fares, with no corresponding financial compensation for such public service obligations. This requirement makes it difficult, if not impossible, for operators to recover their full costs, which leads to an eventual decline in

The sub-sector comprises bus, tram, light rail and suburban rail systems, urban roads, traffic management and parking.

operating assets and service quality. Furthermore, because of their poor financial status, transport operators are unable to attract external financing. In certain advanced transition economies, such as Poland, however, some larger municipalities have started to address their urban transport problems.

Throughout the region there is a need to replace ageing and inefficient operating equipment (bus fleets and rolling stock) and to rehabilitate and modernise fixed tracks and signalling systems. In advanced transition economies, investment in public transport and traffic management systems is required to counter the negative effects of rapid expansion in motorisation, such as increased pollution from traffic and congestion in city centres, and to make public transport attractive as an alternative to car use. Many cities in the Russian Federation, and in early and intermediate transition countries, badly need investment in urban road networks, traffic management systems and institutional development.



EBRD objectives in the MEI sector

Improving municipal infrastructure and services helps to advance the transition process in a number of ways. Reducing costs and increasing the reliability of services help to stimulate the emergence and development of commercial and industrial enterprises. Improvements in residents' living conditions increase public confidence in democratic local government and in the ongoing reform efforts. The decentralisation and commercialisation of the MEI sector as well as private sector involvement are also accompanied by institutional and regulatory reforms that are crucial for the transition process.

The EBRD's activities in this sector aim to advance the transition and to address pressing environmental problems. In all of its operations, the Bank pursues the following objectives:

- decentralisation of the provision and financing of municipal infrastructure and services
- commercialisation and corporatisation of services
- promotion and optimisation of private sector involvement
- development of regulatory structures
- environmental improvement.

Decentralisation of municipal and environmental infrastructure services

Extensive political and fiscal decentralisation has taken place or is under way in most countries of central and eastern Europe and a (growing) number of countries of the Commonwealth of Independent States (CIS). Responsibility for local public services and infrastructure is being devolved to regional and municipal levels of government. For the first time in the history of most countries, democratically elected officials now have statutory responsibility for the provision and financing of these services. Together with the privatisation in the real economy, political and administrative decentralisation represents one of the main factors of the transition process.

The EBRD supports the decentralisation of responsibility for the funding and provision of municipal services. Bank operations encourage municipalities and utilities to assume service responsibilities and to become accountable to local constituencies.

The EBRD's involvement not only aims at financing critically needed urban infrastructure investments, but also at strengthening service delivery systems and building up the capacity of local authorities and their enterprises to provide adequate and reliable public services. It encourages a shift in attitudes from reliance on government grants towards financial self-sufficiency.

By directly providing investment financing to municipalities and municipal utilities without state guarantee, the Bank supports the decentralisation of financing responsibilities and contributes, through its typical conditionalities, to the enhancement of the creditworthiness of its municipal borrowers, thereby developing their long-term capacity for debt financing of capital improvements on a sustainable basis.

Commercialisation and corporatisation of services

A key objective pursued by the EBRD in its operations is the commercialisation of municipal service provision. Commercialisation starts by corporatisation, i.e. by separating publicly owned service providers from government and transforming them into autonomous corporate bodies – usually joint-stock companies owned by regional or municipal governments. These companies should be subject to general commercial law, adopt international accounting standards and be allowed to change user fees that will enable them to be financially viable and promote economic efficiency.

The pace of moving towards the cost recovery of services varies. A major consideration in this respect is the degree to which services in certain sub-sectors can be financially self-sufficient through the use of cost-reflective charges. For certain essential services, such as urban roads, repayment of Bank loans will depend entirely on municipal funds. For other services, a policy of full cost recovery may not be the best option. To overcome existing environmental problems, such as illegal waste dumping, for example, subsidised fees may be required.

An important element in corporatisation is the improvement of financial and operational performance, which is a standard requirement of publicly owned utilities benefiting from EBRD financing. Under programmes based on Bank-sponsored performance audits, a utility is rated on the basis of performance indicators and industry benchmarks. Following the performance audit the utility, together with the EBRD, prepares and adopts a programme to improve its financial and operational performance.

Promotion and optimisation of private sector involvement

Market forces and competition can improve the provision of municipal infrastructure and services. The Bank's mandate to foster the transition towards market-oriented economies and to promote private initiative places it in a unique position to facilitate and optimise private sector participation in the financing and provision of municipal infrastructure and services in its countries of operations.

The primary goal of private sector involvement and increased competition is to improve capital and operating efficiency. This is achieved by the private sector taking substantial risks relating to the design, construction, financing and operation of an infrastructure asset. A key element of private sector involvement in EBRD-financed operations, therefore, is the transfer of risks to those parties best able to manage them, thereby providing incentives for sustained effective performance.

EBRD operations in the MEI sector are designed to achieve efficiencies that are fundamental to the private sector: stronger financial discipline in investment appraisal; experience with a wider range of technological solutions; focus on least-cost solutions; better integration of capital and operating costs; shorter design, procurement and construction processes; and innovation in the financing and operation of services. These operations cover the full scope of private sector involvement from management contracts, concession and build-operate-transfer (BOT) agreements, to utility divestiture.

Where full transfer of responsibility for municipal infrastructure and services to the private sector is politically unacceptable or economically undesirable (because of inadequate regulation or insufficient capacity to enforce regulations and contracts), specific risks may be transferred to the private sector. Such risks could vary from limited (such as collection and construction completion) to more comprehensive (such as operational management for parts or all of infrastructure systems).

Development of regulatory structures and capacity

Having the proper regulatory structure and capacity in place is a key requisite for improving the quality and cost-efficiency of municipal infrastructure and services and attracting private investments and involvement.

There is a widespread need across the region to introduce competition into as many areas of municipal service provision as possible. For some types of service, competition in the market can be harnessed to play an important role, even though it may have to be specially managed to prevent undesirable effects. If, however, there are "market failures" (for example natural monopoly) market as a means of regulation may not be feasible. In these cases, the Bank pays careful attention to the choice of regulatory mechanism and promotes needed reforms and institutional development in conjunction with its financing of investments.

The EBRD promotes and supports the establishment of a regulatory environment in the MEI sector that opens markets for municipal services and provides economic incentives and sanctions for public and private operators to improve efficiency. The Bank also makes available technical cooperation resources to strengthen the capacity of regulators to provide effective monitoring of public and private operators.

Environmental improvement

Improving the environment is one of the key objectives of EBRD operations in the MEI sector. As well as raising the quality of living standards, environmental improvement may also have a positive influence on the transition process, for example by increasing labour

productivity through improved public health and facilitating the development of tourism. In some cases, the severity of environmental degradation may call for EBRD involvement to be considered, even if the Bank-funded part of the investment would not be self-financeable. In such cases, though, the project needs to be structured in such a way that it can achieve a high transition impact, for example through the corporatisation of environmental services and the gradual introduction of cost-effective pricing regimes. Specific objectives of Bank operations in the MEI sector aimed mainly at environmental improvement are:

- raising environmental standards to reach EU requirements
- improving public health
- protecting surface water and ground water
- preserving natural resources
- reducing greenhouse gas emissions
- reducing air pollution.

The EBRD aims to play a catalytic role in structuring investment operations, developing innovative financing instruments such as "Green Equity Funds" and in facilitating resource mobilisation for environmental investment. The Bank participates and contributes to institutional environmental initiatives such as the Project Preparation Committee (PPC), the Danube River Basin Strategic Action Plan and the Helsinki Commission. It works closely with bilateral and multilateral agencies to target the worst environmental problems and provide financing to solve these.

Operational principles: staying ahead of the market

Demand for EBRD investment financing

Studies indicate that investments totalling in excess of €250 billion are necessary in the EBRD's countries of operations to maintain or achieve adequate service levels. According to Bank estimates, in the coming five-year period investments totalling around €15-20 billion per annum, and amounting to 2-3 per cent of the region's GDP, would be achievable. This level of investment is required to overcome the often substandard quality of municipal services, previous under-investment in maintenance and damage to the region's environment.

Demand for investment financing in the MEI sector has developed rapidly but at different rates throughout the region. In the most advanced transition economies, demand is increasing as the legal framework of municipal finances evolves and municipalities develop their fiscal responsibilities, while municipal utilities improve their financial management and revenue collection skills. While financial and economic developments in these countries are not linear and sometimes marred by policy reversals or volatility in international financial markets, commercial banks appear increasingly willing to accept direct municipality risk and provide loans at terms and maturities that reflect the stability of municipal cash flows.

The EBRD provides financing for projects which are financially sound but that cannot attract funding from commercial banks without EBRD involvement. Its financing is provided on terms that match the specific needs of the MEI sector and in ways that no other international or commercial financial institution can match. In particular, the EBRD is unique in that it covers the full spectrum of public-private operations and lends directly – without a state guarantee – to municipalities or municipal service enterprises.

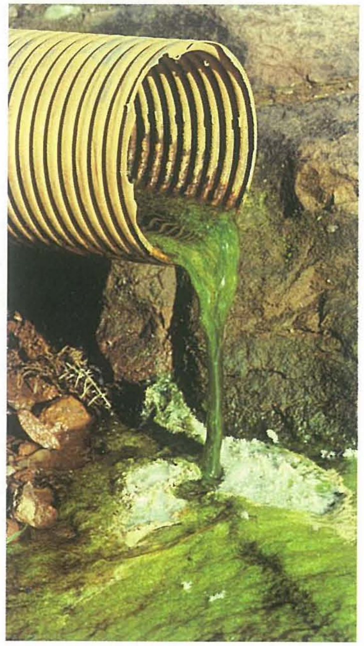
The EBRD is a key player in financing private and non-sovereign municipal operations – generally taking the form of loans to municipalities or to municipal utilities wholly or majority owned by municipalities. Demand for this financing is primarily in countries where governmental involvement has become stable and predictable, with private sector investment facilitated by political and regulatory frameworks and sustained by economic and financial conditions. These countries include the advanced transition economies and most of the EU accession countries.

Demand from municipalities and municipal utilities in less advanced transition economies is more dispersed and centres on the Bank's experience in supporting commercialisation.

Market selectivity

Given the sheer volume of investment requirements and the Bank's limited capacity to meet these, a selective approach is needed. Operations in the MEI sector focus therefore on:

- areas where the EBRD has a clear comparative advantage, such as non-sovereign municipal financing, municipal utility financing, public-private partnerships and private operations, and where its particular sector expertise and project development capacity are most useful;
- projects with demonstration effect in early and intermediate transition economies, where sector reform requirements are high;
- investments that contribute to countries meeting national environmental standards, in particular where meeting such standards aligns with EU accession requirements;
- operations where EBRD funds are linked with co-financing from other international financial institutions, commercial banks or bilateral and multilateral agencies – especially the European Commission ISPA (Instrument for Structure Policies for Pre-Accession) Facility;
- the alleviation of high-priority environmental problems.



The Bank's capacity to play a critical role in facilitating private sector involvement in the financing and provision of municipal infrastructure and to structure and provide investment financing to municipality and municipal utilities without state or commercial bank guarantees are key factors driving demand for EBRD financing. Because of the EBRD's status as an international financial institution, its transition mandate and its capability to mobilise technical cooperation in support of its

investments, the Bank's role in transactions is different from that of commercial banks. The EBRD's knowledge of the municipal infrastructure and services market in its countries of operations and its strong presence in the MEI sector in most key countries allows it to mitigate municipal risks.

Sub-municipal financing, without a full municipal guarantee, in advanced transition countries is a second important area where the EBRD has assumed a key role. In these countries, municipalities are now seeking to concentrate their investments in social and non-revenue-earning infrastructure sectors. As a result, there is rapidly increasing demand for financing of municipal utility investments purely on a corporate (municipal utility) basis without backing from a municipality's full guarantee and credit. Similarly, as funding responsibilities are being shifted to the private sector, demand for financing of privatised municipal utilities and private companies is gradually emerging. EBRD financing can be public (as in the case of municipality-owned utilities), private or a combination of the two.

Investment priorities

Usually EBRD operations in the MEI sector are in support of specific investments, with Bank financing generally targeted at priority investments that will improve the operational and financial performance of existing assets, increase cash flows and lead to improvements in service quality. In most cases, this involves investments in system upgrading, water or heat loss reduction, network and consumer metering, replacement of energy-inefficient equipment, billing and revenue administration, and financial and management information systems. Also included are greenfield capital investments, for example in new sanitary landfills, waste incinerators or water treatment plants, where the need for such investments is clear.

Municipal and Environmental Infrastructure

In cases involving services and infrastructure that directly earn revenue and that, in principle, can be provided on a cost-recovery basis, investments generally need to be financially viable, and EBRD loans are expected to be repaid from cash flows generated by utility operations or project companies. Where revenues accrue indirectly, for example through taxation, or where there are important economic considerations or environmental benefits (for example, in certain cases of solid waste collection and disposal), Bank loans are repaid from a municipality's general revenue.

A number of municipalities in central and eastern Europe are considering the privatisation of all or part of their utilities through the sale of a block of shares that gives a strategic private investor-operator management control of the company. The EBRD supports and facilitates this type of operation by providing funds – either directly or through a special vehicle – in the form of (often quasi-) equity or (junior) debt to finance the purchase of shares by the strategic private investor. The Bank supports these share purchase operations in the context of a utility privatisation, provided that the contractual arrangements include incentives to maximise efficiency gains and the privatisation operation facilitates and improves the efficiency of capital expenditure.

Terms

The EBRD's capability to assess, assume and mitigate risks that commercial banks and investors are not willing to take at this stage in the transition process and to provide financing on terms that are currently not available in the market are key factors in the demand for EBRD financing. Specifically, the Bank takes transition-related risks. These might involve the evolution of municipal finance systems, governmental fiscal relations, and legislation and regulation, which have a fundamental impact on investment opportunities. They could also relate to the evolving institutional capacity of municipal authorities to regulate infrastructure provision or to support tariff regimes based on economic pricing for municipal services.

Given the typical risk profile of municipal and environmental infrastructure investments, maturities of loan financing generally need to be as long as possible, matching the project's cash flow profile or the average economic life of the assets to be financed and easing pressure on raising tariffs in the early years of the investment. The EBRD provides loans with long maturities and repayment terms that avoid user charges being set at levels that are prohibitive and that unnecessarily increase credit risk.

Typically, the main risks for investments in municipal infrastructure and services, namely those related to construction and tariff increases, occur in the early years. The risks decrease sharply as cash flows become stable and public acceptance is established. The pricing of EBRD financing in the MEI sector reflects the risks the Bank is exposed to and is market-conform or, where there are no market indicators, is in keeping with appropriate benchmarks.

Conditionality

The EBRD incorporates conditionalities in its financing in the MEI sector in order to advance reform, achieve transition impact and mitigate credit risk. The Bank's conditionalities typically include: decentralisation of the provision of municipal infrastructure and services; accountability towards consumers; corporatisation and commercialisation; cost recovery, accounting and revenue collection; tariff reform; financial and operational performance; creditworthiness strengthening and private sector involvement.

The EBRD's additionality (supplementing rather than competing with other sources of revenue) lies in its capacity not only to take transition-related risk but also to bring to its operations elements that enhance their long-term sustainability. This is achieved mainly through conditionalities that aim to reduce regulatory and commercial risks.

Financing decentralisation

EBRD operations in the MEI sector fall into three main categories:

- *sovereign-based financing*, mainly in the form of sovereign or sovereign-guaranteed loans to municipalities or municipal utilities;
- *non-sovereign* municipal financing, generally taking the form of loans to municipalities or to municipal utilities wholly or majority-owned by municipalities;
- *private financing* of municipal utilities (on a corporate basis) or of special-purpose companies (on a project finance basis) that are owned or controlled by private operators.

The Bank's approach to addressing the investment needs in the sector varies according to the economic and political systems in each country. The EBRD offers a wide range of financing options depending on the public or private nature of the borrower, the size of the proposed investment programme, and the country's progress in the transition process. The Bank applies this flexibility across its countries of operations and within individual countries.

The EBRD's singular capability to cover the full private-public spectrum of operations gives it the operational flexibility needed to optimise private sector involvement in municipal and environmental infrastructure operations – making private sector participation a means to enhance service quality, achieve investments and improve efficiency and productivity. This flexibility allows the Bank to match the degree of private sector involvement with the particular needs of its client and the regulatory, economic and political environment of the country concerned.

Strategic role of sovereign operations

The EBRD has become increasingly selective in developing sovereign operations, which will constitute a rapidly decreasing share of the MEI sector portfolio in coming years. The main aims of sovereign operations are to:

- establish an early market presence in countries where the potential exists for establishing non-sovereign operations in the future; or
- address environmental problems, where project, company or municipality revenues are uncertain but the Bank's operations can have a significant impact on the transition process.

The EBRD develops operations on a sovereign basis in early or intermediate transition economies, such as Ukraine, Uzbekistan and Kazakhstan, that are of strategic importance as future markets, but where current financial and economic conditions do not yet allow financing on a non-sovereign basis.

Municipality financing

The EBRD provides financing directly to a municipal or regional government in cases where:

- the infrastructure cannot be corporatised, and is directly managed by the municipality itself rather than by a utility company. This is typically the case with services that are not direct revenue-earning, for example urban roads and fixed infrastructure for urban transport (such as tram systems);
- investments are across a number of municipal infrastructure and services sectors and it would be inefficient to provide financing to each utility separately (for example, in towns and medium-sized cities), but where commercialisation and cost-recovery objectives are in place through project agreements with the municipal utilities; or
- the EBRD partially finances or guarantees a municipality's contractual payments to a private concessionaire under the terms of a concession agreement for the development of municipal infrastructure. This can be the case, for example, where a municipality needs investment finance to contribute to capital expenditure or where the private concessionaire perceives a significant risk that the city may not fulfil its contractual obligations.

In the EBRD's direct support to municipalities or regions, a key objective is to develop their self-financing capacity and enhance their creditworthiness. This will enable them to access commercial debt markets and embark on long-term capital improvement programmes on a financially sustainable basis. The standard instrument that the Bank uses to achieve this objective is the Creditworthiness Enhancement Programme.

Public and private municipal utility financing

Municipality-owned utilities

The EBRD lends directly to municipal utilities for investments in direct revenue-earning services where the Bank's financing can be repaid from cash flows from user charges and where cost recovery can be achieved. Where financial, political or regulatory conditions require, EBRD financing is secured by a guarantee from the municipality that owns and controls the utility company. In cases where utility companies are creditworthy in their own right, the Bank provides financing without such a guarantee. In these cases, project support agreements with the municipality are normally necessary to ensure that the municipality does not interfere in the utility's management and, if the municipality is itself a major consumer, that it guarantees payments of its bills to the utility.

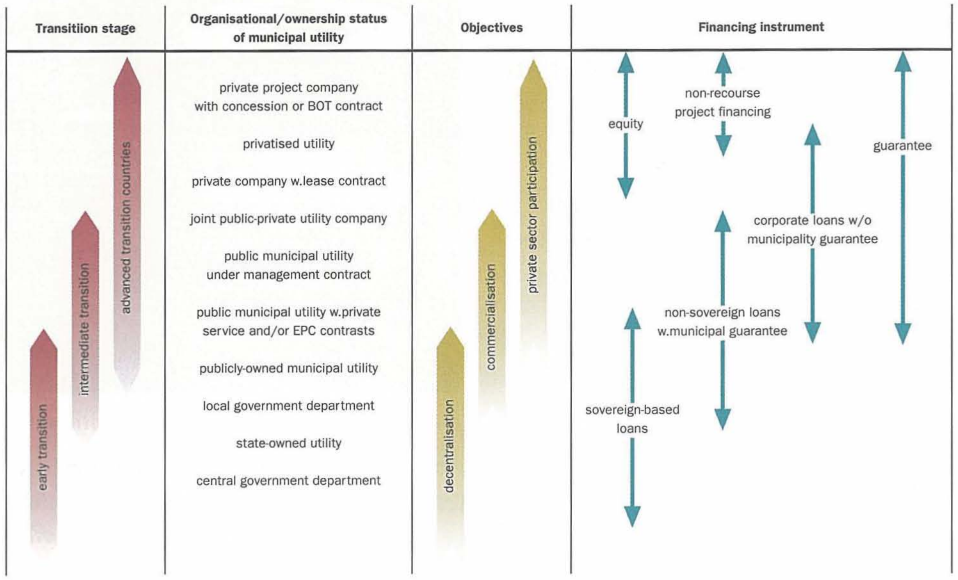
Municipal utilities with private sector participation

There are a number of different forms of EBRD support for utilities that are wholly owned by the private sector or where a private operator-investor has management control and a substantial (but not necessarily majority) ownership share (public-private partnership constructions). The Bank provides loans, guarantees or equity directly to such private utility companies, usually without full guarantees from the municipality. Where appropriate, certain undertakings are obtained from the municipality to ensure that the private utility can operate without municipal interference, that the municipality meets its payment obligations towards the utility company, and that tariffs for user charges will be set and kept at agreed levels.

Special-purpose company financing

The EBRD provides investment financing in the form of long-term loans, guarantees or equity directly to private special-purpose companies (SPCs) that have obtained a concession, generally under build-operate-transfer (BOT) arrangements, for the provision of specific bulk services. These may include the supply of heat or treated water or the treatment of waste water. Bank financing is secured by the SPC's cash flow and its right to provide these services, often on a take-or-pay basis. The EBRD ensures that

Range of EBRD financing to municipal utilities



appropriate contractual arrangements are in place to mitigate risks – for example: fixed price turnkey contracts for design and construction; completion guarantees; performance guarantees from the sponsor; off-take agreements; assignment of specific rights to the Bank; etc.

In the most advanced transition economies, the EBRD's financing depending on the specific conditions may take one or more of several forms: (quasi or pure investment) equity, subordinated debt, senior debt or guarantees. In intermediate transition countries, EBRD financing consists of loans with longer maturities to match the SPC's cash flows over the life of the investment.

In addition to directly financing privately owned SPCs, the Bank lends to municipally owned SPCs established as financing vehicles for BOT-type operations, where there is private participation and management control or where such participation and control is expected in future.

Financial instruments

The EBRD's mandate enables it to cover the full public-private spectrum of municipal operations and to intervene in the MEI sector through a wide range of financial instruments. These include sovereign and non-sovereign loans to municipalities and their utilities; corporate loans to public or private municipal utility companies with or without municipal guarantees; investment and portage equity in public, private or public-private companies; guarantees, including partial risk and partial credit guarantees; and revenue bonds. Where appropriate, the Bank explores means of providing local currency funding to investments.

Loans

The majority of the EBRD's financing in the MEI sector is provided in the form of senior loans, with maturities reflecting the economic life of the investments and the financing requirements of the borrowers. Loans are the preferred means in most cases because of: (i) the nature of the majority of public sector borrowers, which may not be legally constituted in a form that permits or financially supports equity participation; (ii) the need for flexible disbursements during project construction, which can span several years; (iii) the limited potential in this sector for equity gains; and (iv) the possibilities of linking disbursement with commercialisation and creditworthiness covenants. Repayments can be structured to match the cash flow profiles of the project or the company.

Loan financing is provided to countries at all stages of transition and to all kinds of borrower. In most cases the Bank provides senior loans. However, depending on the specific risk characteristics of the country or the project, the Bank may provide loans in the form of subordinated debt, where this is needed to facilitate commercial bank co-financing.

Equity

Equity provides an increasing component of the EBRD's financing in the MEI sector. Typically, returns on equity in the MEI sector are comparatively low, especially when the investee company operates in a monopoly sub-sector where returns are limited by regulation. EBRD equity investments are undertaken in the following circumstances:

- To support privatisation and to ease political resistance to private sector involvement, the Bank may take a balancing equity position in a special-purpose company – for example, a concession company or a part-privatised municipal utility between a private sponsor and a municipality.
- During a private placement or stock market flotation, the Bank may take a pre-privatisation equity position that will encourage other investors.
- In cases where there is scope for a rise in the value of the shares – for example, in the solid waste sector or in water services management companies – the Bank may make a full risk-bearing equity investment.

The EBRD's role as an impartial investor is reinforced by its capacity to participate in the equity capital of (private or private-public) municipal utilities and project companies whose investments it finances. Both municipal authorities and private investors expect the Bank to play a balancing role in private operations. Its presence in investment structuring and equity financing is expected to ensure that contractual arrangements provide appropriate economic and financial incentives for efficiency improvements and that the interests of municipal authorities, consumers and private sector parties are fairly balanced.

In cases where there is scope for an increase in the value of the equity, the nature of the Bank's participation is risk bearing. In most cases, however, the Bank's participation takes the form of portage equity with a put

option at a predetermined return to the private sponsor, municipal owner or both. In operations involving privatisation of municipal utilities in advanced transition countries, where commercial banks are willing to provide loans on longer terms, the EBRD participates through preferred cumulative equity, thus easing pressure on tariffs in the early years of the investment.

Guarantees and credit enhancement

The EBRD's statutes allow it to provide guarantees to facilitate equity investment or commercial bank financing of projects. To date, guarantees have not been utilised by the EBRD in the MEI sector but they have considerable potential and can form an important complement to Bank loans and equity. They are highly flexible instruments that are customised to suit varying country and project conditions. Guarantees could become an important operational tool of Bank additionality and support in the sector, especially in the advanced transition economies, as markets develop, economic growth continues, and financial and regulatory reform of the sector deepens.

Guarantees are well-suited to mobilising private sector financing from both commercial banks and investor-operators. In the MEI sector, they can be targeted to mitigate political, regulatory and municipal performance risks that the private sector may not be in a position to absorb or manage. Guarantees can also be used to extend terms on loans from local or foreign commercial banks to meet the need for long maturities in the sector.

Partial risk guarantees

In private, limited-recourse projects in the MEI sector, contracting municipal companies typically provide investors with undertakings regarding regulation, action or payments that are under their control. In addition, to facilitate private sector financing, municipalities or municipal utilities provide financial support to offset risks that cannot be insured at reasonable cost. The EBRD can provide guarantees not only to give credibility to these municipal contractual undertakings but also to lower investors' perception of risk and consequent risk premium.

Partial credit guarantees

MEI sector investments require long-term funds for their financial viability. At this stage in the transition process, commercial lenders are not able or willing to provide loans at the required long maturities. The EBRD can provide guarantees that allow commercial lenders to make loans with a balloon payment – possibly under an A/B loan structure. Other ways in which guarantee instruments can be used to extend commercial loan terms include: liquidity guarantees in the form of take-out financing or put options; or rolling guarantees that cover a fixed number of scheduled payments. In addition, to encourage commercial financing of public or private infrastructure investment in the sector, the Bank can provide first-loss guarantees, whereby it assumes the loss on a financing up to a fixed percentage of the debtor's total liability.

The EBRD would not provide guarantees against commercial risks. The MEI sector is generally characterised by low market risks due to its natural monopoly and regulated industry. Commercial risks are generally limited and controlled by the private service providers and operators and, therefore, best absorbed by them.

Revenue bonds

In cases where bond financing may be a suitable alternative to EBRD loan financing, the Bank can facilitate access by municipalities and municipal utilities to capital markets – for example, by providing guarantees. The EBRD develops such operations where there is a clear link between the finance raised and its application to (identified and appraised) capital expenditure for improvements in municipal and environmental infrastructure provision.

As international capital markets become more accessible and domestic capital markets develop, there will be considerable potential for project-based revenue bonds, where the cash flow generated by an investment project secures the bond. The EBRD with its AAA international credit rating can play a key role in introducing utility and project-based revenue bonds. It can facilitate their issuance through the provision of partial risk guarantees, such as those related to the unilateral termination of service contracts by a municipality or a municipal utility, or their refusal to pay the project company contractually agreed service fees or compensation, or to set tariffs at required and agreed levels.

Wholesale instruments

In the MEI sector, the scope for Bank financing is limited in certain cases by the small size of investments, which makes it uneconomic to undertake and finance projects on a stand-alone basis. Nevertheless, for strategic reasons relating to a specific sub-sector, country or investment type, the EBRD may wish to become involved in such investments. For example, in certain EU accession countries, such as Estonia, Latvia, the Slovak Republic and Slovenia, the large majority of the urban population lives in relatively small towns. In these countries, there are very few, if any, opportunities for stand-alone projects. To assist small municipalities and to support investments that will facilitate EU accession, the Bank works with regional utility companies, whose service area covers a number of towns, or relies on wholesale financing through financial intermediaries and special purpose project finance companies.

Small municipalities

The EBRD provides financing to municipality majority-owned joint-stock companies where several smaller municipalities own the joint utility company. A key aspect of the Bank's operation in this type of situation is to enable smaller municipalities to obtain EBRD financing.

Environmental loan funds

National environmental funds have been set up in a number of countries to ensure that investment projects for environmental improvement have access to sources of long-term funding. The EBRD is working with several of these funds as they provide a means of channelling loans to small projects and municipalities that otherwise could not receive EBRD funding. A major concern for the Bank in its cooperation with environmental investment funds is the transparency and financial viability of their operations and their capacity to adequately appraise investment projects, monitor project implementation and administer loans.

Municipal services multi-project facilities

Certain types of private investments may require the EBRD to provide financing on a wholesale basis. To facilitate private sector participation in cases where projects are limited in size due to the nature of the investments (such as incremental capital improvement and upgrading) or sector (such as waste management), the EBRD uses a multi-project facility (MPF) instrument. The main characteristic of the MPF is that a (private) sponsor identifies, prepares and appraises an investment project, provides equity financing and obtains EBRD funding.

Green equity funds
As a result of increasing levels of investment in the MEI sector, the demand for environmental goods and services is expanding rapidly. In December 1997, the EBRD helped finance the Central and Eastern European Environmental Investment Fund, a "green equity fund". The Fund invests in local industries that produce equipment, goods and services for the environmental sector and provides equity and subordinated debt financing to small environmental infrastructure projects. There is growing interest among financial investors to set up venture funds focusing on the municipal infrastructure and services sector. The Bank, on a selective basis, pursues investment opportunities within this area and supports the establishment of such equity or loan funds.

Technical cooperation

Municipalities, particularly in advanced transition economies, want to work with the EBRD because of its ability to provide assistance to municipal clients in the development, structuring and appraisal of investment operations and the strengthening of their financial, managerial and operational capacities. Substantial demand for Bank investment financing exists in municipalities and municipal utilities in countries such as Croatia, the Czech Republic, Estonia, Latvia, Lithuania, Poland and Romania that wish to benefit not only from the financing itself but also from the EBRD's investment-structuring capacity and expertise. Municipalities seek cooperation with the EBRD because of its financially disciplined approach to investment appraisal and selection, and its support for the commercialisation of service provision and the strengthening of municipal creditworthiness.

In projects involving the private sector, the Bank's role as adviser is particularly important. It promotes and facilitates private sector participation through dissemination of information and a focus on reducing political, municipal and regulatory risk during the early project development phase. It helps municipal authorities to gain a thorough understanding of the implications of private sector involvement by working with them to develop the details of project arrangements and to create the conditions necessary to attract experienced and well-qualified operators and investors.

The EBRD is expanding its role in advising municipalities on the broad direction, objectives, options and procedures for involving the private sector and in providing assistance through technical cooperation resources. This funding is used for the institutional, technical and analytical preparation of competitive bidding processes to select private parties for the financing and provision of municipal infrastructure. Investors and municipalities alike see the Bank's participation as especially critical in ensuring that strategies and arrangements for private sector involvement support financial viability as well as keeping the interests of local authorities, consumers and service providers reasonably balanced. Experience to date clearly indicates that projects where the EBRD is assisting in the tendering of concession, BOT or similar contracts have an important demonstration effect for the region as a whole. The Bank's advisory support complements the way in which it may subsequently offset political and municipal risks in project financing.

Another important aspect of the EBRD's work in facilitating private sector participation is assistance in the review and, where necessary, improvement of the legal and regulatory framework in order to remove key obstacles to effective private investment in the MEI sector while protecting the long-term interests of service consumers and municipalities. The Bank supports the use, where possible, of technical cooperation resources to assist in developing the appropriate institutional, regulatory and contractual mechanisms. These resources can also be directed to address deficiencies in the secured transactions laws, pledge registries and concession laws in any of the Bank's countries of operations.

The specific objectives of operations financed by the EBRD's technical cooperation funds are:

- investment preparation and appraisal, and technical implementation support
- strengthening decentralisation (for example, the preparation and implementation of creditworthiness enhancement programmes)
- furthering commercialisation (for example, the preparation and implementation of financial and operational performance improvement programmes; the implementation of corporate partnerships where these cannot be financed from loan proceeds)
- development of appropriate regulatory structures and capacity
- facilitation of private sector involvement (for example, preparation of tenders for concessions and BOT operations).

Sources of co-financing

International financial institutions

The EBRD has already co-financed a considerable number of operations in the MEI sector with the EU's Phare programme and with other international financial institutions (IFIs): the World Bank (IBRD), the European Investment Bank (EIB) and the Nordic Investment Bank (NIB). The EBRD's approach complements that of other IFIs operating in the MEI sector. It is the only IFI that can lend directly to municipalities without a sovereign or bank guarantee. It is also the only IFI with a full range of financing instruments, enabling it to work across the full public-private spectrum, and to offer new instruments to its clients as they move along this spectrum.

Commercial banks

Commercial banks are becoming increasingly active investors in the MEI sector, especially in the advanced transition economies. However, they generally seek to work with the EBRD in the sector as they recognise the benefits of the Bank's active participation in mitigating foreign currency access risk, municipal risk and project risk. Commercial banks also rely on the EBRD's financial and legal due diligence work, which is much more extensive and detailed than such work carried out by the commercial banks themselves. The EBRD's broad and strong presence in the municipal sector, its ongoing policy dialogue with national governments and its specific sector-expertise are factors that generally lead commercial banks to co-finance with the EBRD.

The EBRD helps its borrowers to find commercial co-financing on the most advantageous terms: the perceived high quality of projects developed with EBRD assistance gives a competitive edge. The Bank seeks to co-finance with commercial banks by extending its preferred creditor status through syndication under the A/B loan structure, through providing guarantees for the longer maturities not typically taken by commercial banks and by offering partial guarantees.

Investment grants

The EBRD, when working on projects in the MEI sector, cooperates closely with the European Commission, bilateral donors and the Project Preparation Committee (PPC). Donor funding has enabled the Bank to finance environmental projects that, due to the nature of the sector, require extensive resources for their preparation and appraisal.

Where the EU and bilateral donors have provided grants for investments, this has helped to improve the financial feasibility of projects and allowed the Bank to provide loans while observing sound banking principles on its financing.

EU accession requirements offer particular opportunities for close cooperation between the EBRD and the European Commission in co-financing investment projects in the MEI sector. The European Commission has established an investment-focused Instrument for Structure Policies for Pre-Accession (ISPA) to provide investment grants to the 10 EU accession countries which are expected to total €1 billion per year over the period 2000-2006. This instrument is targeted at environmental and transport infrastructure investments. The EBRD has entered into an agreement with the European Commission to facilitate ISPA co-financing of EBRD-prepared investment projects. A substantial number of municipal and environmental infrastructure investment projects are being developed and appraised by the EBRD and have been proposed for ISPA financing. These projects are mainly in water supply, waste-water collection and treatment, and solid waste management and disposal.

The EBRD's access to official sources of investment grants is an important aspect of its additionality, enabling it to become involved in the financing of investments that otherwise would not take place.

Glossary

A/B Loan
The EBRD is lender of record for the entire loan but commits only to the A portion while sharing its preferred creditor status (see below) with the lenders of the B portion (generally commercial banks).

Balloon payment
Final lump-sum payment of unpaid principal at the end of a loan period.

Commercialisation
The management of a municipal service operator according to commercial principles, including economic pricing of services, sound capital budgeting, and arm's length procurement of capital investments. Corporatisation of the municipal services provider is often a step towards, if not a prerequisite to, commercialisation.

Corporatisation
The process of giving the status of a commercial company to a municipal services provider that was hitherto organised as a direct local or central government department or as a public corporation. This does not necessarily entail the transfer of the operating assets to the company.

Junior loan
Loan that has a lower priority to a senior loan.

Multi-project facility
An agreement between the EBRD and a private sponsor whereby the Bank accepts to provide financing under standardised terms for several projects developed by that sponsor and meeting pre-agreed criteria. This is one of the wholesale instruments developed by the Bank to reach smaller projects.

Portage equity
Equity characterised by a guaranteed return and the right to sell (put option) the Bank's shares to a creditworthy party (usually a private sponsor). In some cases, the Bank may agree a political risk "carve-out" whereby it cannot exercise its put if political events occur.

Preferred creditor status
Undertaking to the EBRD by its shareholders (and countries of operations) that they will not seek the rescheduling of the Bank's loans or will restrict the conversion into the required currency of any amounts due to the Bank.

Preferred cumulative equity
Equity that pays a fixed dividend and has claim to assets of a corporation ahead of common stockholders in the event of liquidation.

Public-private partnership
A particular form of private sector participation in the financing and provision of municipal services and infrastructure characterised by private sector management of the project company but a public entity or municipality retaining a significant stake and sometimes the majority of the share capital of the project company.

Put option
Contract giving the holder the right, but not the obligation, to sell a security or financial instrument for the specified period of time at a specific price, called the exercise price or strike price.

Senior loan
Loan that has priority of claim ahead of other obligations.

Subordinated loan
Loan giving a claim against an issuer's assets that is lower ranking, or junior to, other obligations, and is paid after claims to holders of senior securities are covered.