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Development of Financing Mechanisms in the Baltic Sea Region
1991-2005

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Abstract

The paper describes the development of financial mechanisms for environmental investments in the Baltic Sea Region during the period 1991 - 2005.

The Baltic Sea is naturally vulnerable to pollution due to its semi-closed character and long residence period of between 25 and 40 years, which results in the accumulation of pollutants. This being said however, in the late 1950's the Baltic Sea was regarded as "healthy". The large-scale industrialisation exacerbated the situation by increasing the amount of nutrient discharge and hazardous substances. By the end of the 1960's the gravity of the situation caused deep concern among several Baltic Sea countries. The need for regional cooperation on protective measures was apparent, leading to the political process that culminated in the creation and agreement of the Helsinki Convention in 1974.

Political processes

Collaboration and cooperation among the Baltic Sea countries was enhanced following the liberalization in 1989. The Baltic Sea Declaration, signed in 1990, defined "The Baltic Sea Joint Comprehensive Environmental Action Programme" (JCP). In 1992, a Programme of Action for a 20-year period was approved, anticipating a phased strategic implementation throughout the region including 132 "hot spots" with an estimated total cost of about 18 billion Euros. From the beginning it was clear that one major constraint to the implementation of the programme would be financial resource mobilisation.

1991 also marked the accession process of multiple Central and Eastern European countries for membership to the European Union, concluding in the Baltic region on 1st May 2004 when all Baltic Sea countries apart from Russia became full members of the European Union. The implementation of EU legislation was a major driver for environmental investments in the application countries supported by amongst others, EU financing programmes.

A series of Ministerial meetings within the "Environment for Europe" process have addressed the development and improvement of the European environment, including methods of strengthening cooperation and financing of investments. This has resulted in the establishment of the European Action Programme (EAP) and a Project Preparation Committee (PPC) placed at the European Bank for Reconstruction and Development (EBRD).

Another important development was the European Union's Northern Dimension initiative, which led to the creation of the Nordic Dimension Environmental Partnership (NDEP). Developed in 2001, the concept builds on the successful Baltic Sea Environment Programme and responds to calls from the Russian Federation and the international community for a concerted effort to address environmental problems in northwest Russia.

A working group made up of EBRD, EIB, NIB, WB, the EU Presidency and the European Commission resulted in the creation of the NDEP Support Fund. The NDEP aims to deliver solutions to some of the most pressing environmental problems facing northwest Russia,

which, to date, consists of a €1.7 billion project in the pipeline. Through its involvement in the NDEP, the EIB received a lending mandate to finance environmental projects in Russia.

Financing mechanisms

International sources of funding, including from the European Union, International Funding Institutions (IFIs), bilateral donors, export credit agencies and commercial banks, and direct investment by foreign companies have been provided over the years.

During the transition stage of the Baltic countries, where affordability has been a critical constraint to investments, the use of co-financing that blends loans from IFIs, grants from the European Union and bilateral donors has proven to be a critical tool. When combined with grants, the size of the projects can be larger, allowing greater impacts and reducing the effective cost to the cooperating government or investors. This approach also reduces the impact of adjustments to tariffs for services to project beneficiaries, thus decreasing potential adverse impacts on populations with low or fixed incomes.

The paper describes the different types of funding, a general overview of which is presented in the figure below.

Domestic resources	Tariffs and local environmental funds In-kind contributions Twinning arrangements Private sector participation	
International resources	Bilateral funding EU funding IFI funding	Country wise Phare, LSIF, ISPA, SAPARD, Tacis, LIFE, SAVE CEB, EBRD, EIB, NIB, NEFCO, WB

In conclusion, the strong political commitment, the model of co-financing and direct involvement of IFIs has successfully facilitated investments in improved environmental management and administration, direct investments in environmental infrastructure and modern installations resulting in clear reductions of pollution loads to the air and water environment and most importantly, improved living conditions for millions of people living around the Baltic Sea.

Introduction

The aim of this paper is to provide background information on the developments and creation of financing mechanisms for the environment in the Baltic Sea Region from 1991-2005. Further, these developments are related to the political developments with regard to the break up of the former Soviet Union, the increased integration into the Environment for Europe process, the EU accession preparations and the EU accession.

The paper provides a brief introduction about the Baltic Sea environment followed by a description of the political processes in the region since the 1970's and in particular since the major political changes in the early 1990's. The processes are the establishing of the Helsinki Convention and the creation of the environmental action programme, the EU accession process, the Environment for Europe process and the Northern Dimension process. The next section describes the different funding activities that have been established for the Baltic Sea region including the domestic sources and the international transfers such as bilateral donors, the EU programmes and the International Financing Institutions. Finally the paper provides a collection of data about investments related to donors and recipient countries.

The Baltic Sea environment

The Baltic Sea is naturally vulnerable to pollution due to its semi-closed character and particular hydrography. The shallow, narrow Belts and the Sound permit only a slow water exchange between the Baltic Sea and the North Sea. As a result, the water in the Baltic Sea has a long residence period of between 25 to 40 years, which promotes the accumulation of pollutants.

As late as 1950 the Baltic Sea was still regarded as environmentally "healthy". Large-scale industrialization throughout the basin had not yet made its impact, automobiles were few, and intensive agriculture and forestry, based on heavy use of chemical fertilizers, was only commencing. Since then the situation has changed considerably. Pollution now threatens the entire Baltic Sea catchment area as well as the Baltic Sea itself, and ultimately the health and well-being of the 80 million people who live there.

At the end of the 1960's deep concern was expressed by especially scientists in many Baltic Sea countries of increasing pollution of the Baltic Sea. Responsible authorities in the countries recognized the concern and it was considered that national efforts only could not solve the problems. Regional cooperation was needed to agree on protection measures to be taken by all Baltic Sea countries.

The Political process

1. Establishing the Helsinki Convention

On the initiative by the Finnish government two international expert meetings were convened in 1973 considering the structure and subjects of an international convention. The initiative resulted in the signing of the Convention on the Protection of the Marine Environment of the Baltic Sea Area at a Diplomatic Conference in Helsinki in 1974. After the break up of the Soviet Union the new countries Russia, Estonia, Latvia and Lithuania became contracting parties to the Convention. In 1993 the Convention was amended to enable the accession of the European Economic Community. Today all Baltic Sea riparian states and the European Union are contracting parties to the "Helsinki Convention".

The liberalization, which took place in Eastern Europe countries in 1989, led to closer contact between all Baltic Sea countries and increased the commitment to environmental cooperation. In 1990 Heads of Governments and high Political Representatives signed a Baltic Sea Declaration in Ronneby, Sweden. The Declaration defined "The Baltic Sea Joint Comprehensive Environmental Action Programme" (JCP) as a tool to implement the aims of the 1974 Helsinki Convention. In 1992 a Diplomatic Conference of the Helsinki Commission approved a 20-year Programme of Action, anticipating a phased strategic implementation throughout the region including 132 "hot spots" with an estimated total cost of about 18 billion ECU. Furthermore, a HELCOM Programme Implementation Task Force (PITF) was established within the Helsinki Commission.

1.1 The action programme (JCP)

The action programme addressed the objective of ensuring the ecological restoration of the Baltic Sea and the preservation of its ecological balance by identifying problems and priority actions in all the countries within the Baltic Sea catchment area. The long term Programme encompasses both preventive actions to promote sustainable use of the Baltic Sea environment, and curative actions to rectify the legacy of environmental degradation from point and non-point source pollution. In addition to these investments, the Programme supports development of appropriate environmental policies and legislation, promotes the use of economic incentives to encourage environmentally sound actions, strengthens institutional capacity and human resources, and increases the local capacity to finance environmental measures.

An ad hoc high level Task Force established within the framework of the Helsinki Commission elaborated the Programme. The members were all the Contracting Parties to the Helsinki Convention including the Commission of the European Communities as well as four multilateral financial institutions – the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), the Nordic Investment Bank (NIB), and the World Bank.

The Task Force used a variety of studies and sources of information to develop the Programme. These included national plans prepared by the Baltic Sea States as well as by the Czech and Slovak Federal Republic and Norway, pre-feasibility studies of environmental issues, the sources and magnitude of pollution loads, and options for pollution control and improved environmental management throughout the Baltic Sea catchment area. Special studies were also made of agricultural runoff, wetlands, and the impact of emissions into the atmosphere. The pre-feasibility studies and special studies were financed by grants totalling about 5 millions ECU from Denmark, Finland, Germany, Norway, Sweden and the Commission of the European Communities, the Nordic Project Export Fund (NoPEF), and the World Wide Fund for Nature (Sweden)

1.2 Financing the programme

From the beginning it was clear that one major constraint to implement the programme would be the mobilisation of the financial resources needed. The unprecedented political and economic changes affecting the entire Baltic Sea region after 1990 had serious implications for Programme financing. The formerly centrally planned economies were going through a dramatic economic restructuring, which in the short run seriously impaired their creditworthiness as well as the capacity to produce goods and services. The short-term prospects for major economic improvements were limited. The acute demand for basic items such as energy, food and medicine in Estonia, Latvia, Lithuania and Russia impeded the use of local financing for the Programme over the short to medium-term. However, despite the difficulties, the transformation into market economies permitted them over time to assume an increasing share of Programme financing.

The Diplomatic Conference in 1992 requested the continued partnership of the four multilateral financial institutions to facilitate the funding of the programme and it was decided to organise a special conference for mobilising local, national, bilateral, international and other financial resources to implement the programme. The conference took place in Gdansk, Poland in 1993.

At the end of this process between the Baltic Sea countries another process started – the application by some Central and East European countries (CEC) for membership of the European Union.

2. The European Union accession process

The enlargement process started when the CEE countries signed their Europe Agreements. Poland signed in 1991 and the three Baltic States Estonia, Latvia and Lithuania signed in 1995. Accession negotiations were carried out individually with each country on the basis of a screening of the applicant countries status vis á vis the EU requirements. The environmental screenings were concluded in 1999 and the Council decided when negotiations should be opened on specific chapters.

The formal opening of the negotiations of the Environment Chapter of the acquis took place for the first countries at the end of 2000. The EU environmental and agricultural acquis are considered difficult to implement and the EU commissions' Environment Directorate General provided support to the applicant countries via guidance documents, training and concrete assistance projects. Other bilateral donors also supported the process.

The approximation to the EU requirements consisted of transposition of the relevant EU legislation, arranging the necessary administrative and other structures for implementation and enforcement and, ratification of international conventions to which the EU was a party. In particular the establishing of the administrative capacity of implementing agencies and local administrations is a heavy burden and an area where donor support and assistance was and still is needed.

During the negotiations it was clear that post-accession periods were needed for some directives, e.g. where financially heavy investments are required or where immediate compliance would have unacceptable social implications. Such areas as urban waste water treatment, large combustion plant requirements, packaging waste and industrial pollution prevention and control requirements were permitted transition periods.

The accession process ended formally the 1st May 2004 when the Baltic Sea coastal states Estonia, Latvia, Lithuania and Poland became members of the European Union. Also, the Czech Republic, part of which discharges to the Baltic Sea, became a member. As a consequence of the membership several bilateral donors have phased out their involvement in the former accession countries and shifted the priorities towards Northwest Russia.

2.1 The former Soviet Union Countries

The former Soviet Union Countries known collectively as the CIS (Commonwealth of Independent States) have formalised their relations with the EU by negotiating individual Partnership and Co-operation Agreements (PCAs). These are ten-year bilateral treaties that set up a legal framework defining political, economic and trade relationships between the EU and the partner country and commit the country to bring its legal system closer to the requirements of the European Union. For the Baltic Sea Belarus, Russia and Ukraine is of interest.

3. The Environment for Europe process

Since the early 1990's, a series of Ministerial meetings have been discussing the development and improvement of the European environment after the major political changes in Central and Eastern Europe (CEE) and in Eastern Europe, Caucasus and Central Asia (EECCA). The meetings have been part of the "Environment for Europe" process.

The first Ministerial Conference was held in 1991 at Dobris Castle in the former Czechoslovakia. The conference discussed ways of strengthening cooperation to protect and improve the environment and long-term strategies toward an environmental programme for Europe.

The second Ministerial Conference in Lucerne in 1993 focused on external sources of environmental financing of actions although the participants acknowledged that the largest proportion of the financing for environmental investments in the CEE and in EECCA would come from the countries themselves. Priority setting, strengthening of local financing institutions, cost effective use of resources and using external funding as a catalyst to leverage domestic funding were underlined. The European Action programme (EAP) was established and a Secretariat placed in the OECD. Furthermore a Project Preparation Committee (PPC) was established and allocated to the EBRD.

At the third Ministerial Conference in Sofia in 1995 it was acknowledged that demand for environmental financing was still low throughout the region. It was considered that major obstacles were the high price of commercial financing, limitations on flexibility and low absorption capacity more than the lack of financing itself. Developments of flexible financing mechanisms and soft financing were needed.

The Aarhus Conference in 1998 recognised that there was a need to strengthen focus on the EECCA, as the gap between environmental financing levels in CEE and EECCA countries had become evident. Developments in

environmental financing in CEE were increasingly driven by the EU accession process and directive implementation. For the EECCA countries there were no equivalent drivers or clear goals for environmental developments. The Implementation of the Environmental Action Programme for Central and Eastern Europe (EAP Task Force) activities were refocused toward the EECCA, with specific highlight on integrating environmental concerns into economic development, strengthening capacity for environmental financing and focusing on public private partnerships.

The fifth Ministerial Conference took place in Kiev in 2003 and status of the financing of environmental protection was considered as one important subject. Also the course for future European cooperation after the EU enlargement was set.

4. The Northern Dimension

The European Union's Northern Dimension initiative aimed to enhance co-operation between the EU and its member states and the region's seven partner countries: Estonia, Iceland, Latvia, Lithuania, Norway, Poland and the Russian Federation.

In June 2000, the European Council meeting in Feira, Portugal, endorsed the Northern Dimension Action Plan, which gave high priority to the environment and nuclear safety. It was recognised that the international financial institutions (IFIs) have a central role in fulfilling the region's investment needs through commercially viable projects.

In March 2001, the IFIs as a group expressed their willingness to work together in promoting and financing environmental investments focussing on northwest Russia and Kaliningrad. The EU's mandate, the co-operation among the IFIs and the support of donors led to the creation of the Nordic Dimension Environmental Partnership (NDEP).

The concept of the NDEP builds on the successful Baltic Sea Environment Programme. It was developed during 2001 in response to calls from the Russian Federation and the international community for a concerted effort to address environmental problems in northwest Russia where the need for environmental investments is formidable.

The Ministerial Conference on the Northern Dimension in Luxembourg in April 2001 requested a concrete proposal from a working group made up of EBRD, EIB, NIB and the World Bank, the EU Presidency and the European Commission. Two months later, the European Council welcomed this proposal in Gothenburg, Sweden and requested the European Commission, in cooperation with the EBRD, to organise a pledging conference for a fund to support NDEP activities – the NDEP Support Fund.

A Steering Group, comprising of representatives from EBRD, EIB, NIB, the World Bank, the European Commission and the Russian Federation, was established. The Group identified 12 short- and medium-term projects in water, wastewater, solid waste and energy efficiency.

In December 2001, the Rules of the NDEP Support Fund were agreed by the EBRD, which is in charge of administering the Fund. NDEP and the NDEP Support Fund became fully operational in 2002, once the pledging conference secured the necessary initial contributions. The Assembly of Contributors, grouping all donors to the Fund, held its first meeting in November 2002 to decide on the allocations for specific projects. The lead on individual projects is shared among the IFIs.

In the case of traditional environmental projects, NDEP grants provide a portion of the total funding required acting as a catalyst and thus promoting further investments in environmental projects. The majority of funding is provided through normal project finance from the IFIs and their partners. In the case of nuclear projects, NDEP grants provide total funding required.

The NDEP aims to delivering solutions to some of the most pressing environmental problems facing north-west Russia, which, to date, consists of a €1.7 billion pipeline of projects. As of the end of 2004, the NDEP has leveraged investments of more than €900 million for environmental projects. Through its involvement in the NDEP, the EIB has a lending mandate for financing environmental projects in Russia for the first time.

In conclusion of the processes described above, it can be recognised that the development of the framework for environmental activities and the financing hereof has been driven through several parallel high-level political initiatives at Prime ministers and Ministerial level and directly involving the major International Financing Institutions. The cooperation and coordination between the political and international financial sector has been crucial for the successful development that has been realised. A timetable providing a general overview of the developments are presented in Annex 1.

Funding of activities

1. Baltic Sea environmental financing

During the past decade, environmental investment has increased dramatically, due to the political changes and increasing public concern about the environment. Investment has mainly been directed towards reducing industrial pollution and improving municipal wastewater treatment, but measures to reduce pollution from transport and shipping and to protect habitats have also been funded.

In the Baltic countries in transition where affordability has been a critical constraint to investments, the use of co-financing that blends loans from the International Financing Institutions (IFIs) and grants from the European Union and bilateral donors has proven to be a critical tool. When combined with grants, the size of the projects can be larger, allowing greater impacts and reducing the effective cost to the cooperating government or investors. This approach also reduces the impact of adjustments to tariffs for services to project beneficiaries, thus decreasing potential adverse impacts on populations with low or fixed incomes.

International sources of funding, including that provided by the European Union, IFIs, bilateral donors, export credit agencies and commercial banks, and direct investment by foreign companies have been provided over the years. Most of the assistance in the early 1990s was so called technical assistance i.e. training workshops to acquaint civil servants with west European environmental protection practices or support for developing the administrative capacity of environmental ministries. Later on focus has moved towards support to public sector investments in environmental infrastructure. Table 1 shows the development of the total environmental commitments to the Baltic Sea countries from 1996 – 2001.

	1996	1997	1998	1999	2000	2001	Total
Belarus	1.3	1.5	0.4	0.5	0.8	1.4	5.9
Czech Republic	1.5	202.8	55.5	96.1	240.9	127.2	724.0
Estonia	10.4	10.0	19.1	56.8	68.6	50.3	215.1
Latvia	58.8	27.9	34.8	68.2	83.5	39.9	313.0
Lithuania	19.1	14.6	47.2	59.8	51.4	80.5	272.6
Poland	73.4	372.1	223.4	274.8	383.1	594.2	1,921.0
Russia	32.0	57.9	32.7	65.4	99.4	73.2	360.6
Ukraine	6.5	9.5	23.0	13.5	37.3	29.3	119.2

Table 1 Total environmentally related commitments to the Baltic candidate countries and Belarus, Russia and Ukraine in Million Euro (1996-2001). Sources: The Regional Environmental Center for Central and Eastern Europe (2003). Belarus, Russia and Ukraine from UN Economic Commission for Europe (2003)

2. Investment needs and environmental expenditures

The economic situation in the Central and East European countries (CEE) is the basis and limiting factor for environmental investments necessary for implementing the EU legislation and clean-up activities. Annex 2 provides basic information about some of the relevant countries discharging to the Baltic Sea.

The accession process has mainly driven the environmental investments in the CEE. The investment needs for implementing the EU acquis have been estimated and are shown in Annex 3. The estimate includes some heavy

investment directives such as the Waste Water Treatment Directive but does not include the Water Framework Directive and the revisions to the Large Combustion Plant Directive.

Table 2 shows the environmental expenditures in some of the countries discharging to the Baltic Sea in 2000 and the expenditure per capita during 1996 - 2000.

Country	Euro Millions (2000)	Expenditure per capita (Euro), 1996-2000				
		1996	1997	1998	1999	2000
Czech Republic	1097	101	137	125	114	106
Estonia	68	51	51	55	45	47
Latvia	40		3	3	4	17
Lithuania	133		16	31	27	36
Poland	1539	45	48	56	48	70

Note: The Czech Republic: total investment, specialized producers current expenditure 1997- 2000.

Lithuania: 1997 public and industry, Latvia: 1997-2000 investment, Poland: 2000 public and industry, 1996-1999 public and industry investments.

Table 2 Total environmental expenditure in 2000 and the expenditure per capita during 1996 - 2000. Prepared from: The Regional Environmental Center for Central and Eastern Europe (2003)

When comparing the investment levels the size of the countries should be kept in mind as well as the administrative and economic capacity to receive international financial project support. Also local and national priorities and urgency of problems may influence the investment rate.

3. Types of funding

International funding in the form of loans, soft loans, grants and other assistance has been crucial in speeding up the implementation of environmental measures in the countries in transition thereby supplementing the domestic resources of the recipient countries. The different sources of funding will be described below.

Domestic resources	Tariffs and local environmental funds In-kind contributions Twinning arrangements Private sector participation	
International resources	Bilateral funding EU funding IFI funding	Country wise Phare, LSIF, ISPA, SAPARD, Tacis, LIFE, SAVE CEB, EBRD, EIB, NIB, NEFCO, WB

Table 3 General overview of funding sources described in the text

3.1 Domestic resources

National and local budgets have been extensively used in the financing of major investments, especially for municipal water, wastewater and waste management projects.

Public transfers

Public transfers are used to finance environmental administration, monitoring programmes etc. and are often used to subsidise environmental infrastructure services (both capital and recurrent expenditure). These kinds of subsidies have played an important role in the development of municipal environmental infrastructure in the transition countries as well as in OECD countries and often represent more than 75% of capital outlays.

Subsidies reduce the revenue requirements to be covered by user charges and thereby reduce negative social impacts. On the other hand subsidies may encourage end-of-pipe solutions instead of pollution prevention at source and may result in over sizing of infrastructure and hamper saving of water and energy.

Tariffs and local environmental funds

The use of tariffs to cover investments or operational expenses is an option for any environmental infrastructure project. In the West, such tariff systems are well established, but in the transitional countries the idea of financing environmental services from user fees represents a new approach. Concerns have been raised about how access to such services can be preserved for everyone i.e. avoiding negative social impacts.

Tariffs are the correct way of paying for at least the operations and maintenance costs, and increasingly for debt service, according to the Polluter Pays Principle. However, experience shows that the absence of modern utilities that meter and charge for their services signifies that local tariff revenue has to be build up gradually as the utilities' administrative capacity increases through training programmes and investments in metering and modern institutions. Low consumer income levels, also imply that operating surpluses will be hard to achieve in the short run. It appears that local funding sources are not able to play an adequate role in investment financing in the early phase of a programme. It is therefore all the more urgent to develop and implement the administrative, legal and technical systems to build a reliable and growing revenue base which would increase the availability of local funds and lead to improved creditworthiness.

National environmental funds

Environmental funds are institutions or budget lines in ministries with working capital usually based on environmental fees, fines, and charges for pollution and the utilisation of natural resources such as minerals. The funds have been a major source of funding to support environmental activities, mainly through grants, soft loans and sometimes equity investments. The funds are operating at national and/or local level. One observation is that municipalities which benefit from environmental funds coming from environmental taxes usually may have less direct incentive to reduce the pollution that generates the taxes.

There are two main categories of funds:

- Funds capitalized by domestic revenues generated principally from environmental fees and fines or product charges. This group includes most national, regional and local funds.
- Funds established and capitalized by donor grants or IFI loans. This group includes debt-for-environment swaps (e.g. the Eco Fund in Poland) and Environmental Investment Funds in Lithuania and Latvia capitalised by Phare grants.

Environmental funds have played an important role in financing environmental expenditures. In Latvia the environmental fund share in total expenditures accounted about 43% in 2000. In Estonia the funds share reached more than 10% of total expenditures while in Lithuania it was below 10%.

Poland's National Environmental Protection Fund was established in 1989 and collected 9 million ECU in 1990. It has been especially effective particularly for financing of municipal infrastructure such as waste water treatment and solid waste management facilities. However, its income from water and wastewater charges comes from companies that are state-owned and often subsidized. Thus, the revenues of the National Fund are eventually derived from the public budget and contribute to its deficit.

The fund and the related voivodship (regional), powiat (county) and gmina (municipal) environmental funds have supplied an estimated 40% of the financing for environmental protection in Poland.

In-kind contributions

The recipient countries have contributed land for various water, wastewater and solid waste management projects. Labour and materials have also been provided for specific projects by local beneficiaries.

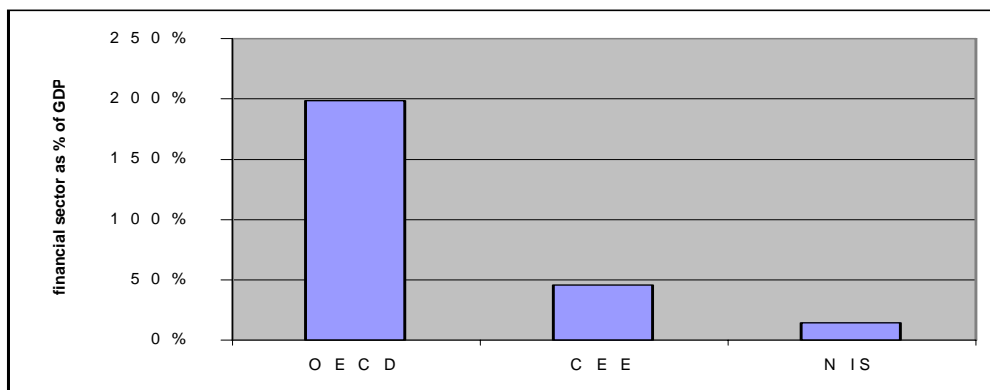
Twinning arrangements

As well as the various types of funding, also many organisational solutions such as twinning arrangements with Nordic utilities has provided practical help with development projects, in the field of human resources, for example. Many non-governmental organisations have also been actively involved.

Private sector participation

Private sector investors and development finance institutions have been of critical importance in the implementation of projects. Increased private sector project financing may reduce the present reliance on government subsidies and loans. However, it appears that a precondition is that the economies has been stabilised and legislation concerning privatization and foreign investments is enacted. Even so, private investors may be deterred by the high risks that characterize investments in developing economies.

Regarding the private sector involvement figure 1 shows the role of the financial sector related to the GDP in 1998. While the sector has a very dominating role within the OECD it is rather weak in the Central and Eastern Europe countries and particular in the NIS countries where the importance in 1998 was very small.



Notes: OECD member countries: Poland, the Czech Republic, Hungary and Slovakia are included in CEE; Figures are non-weighted averages for 1998; the size of financial sector is measured as an aggregated value of bank deposits, outstanding corporate bonds and commercial papers, and stock market capitalisation.

Figure 1 Relative Size of the Financial Sector in the OECD and Transition Economies, 1998. Source: UN Economic Commission for Europe (2003)

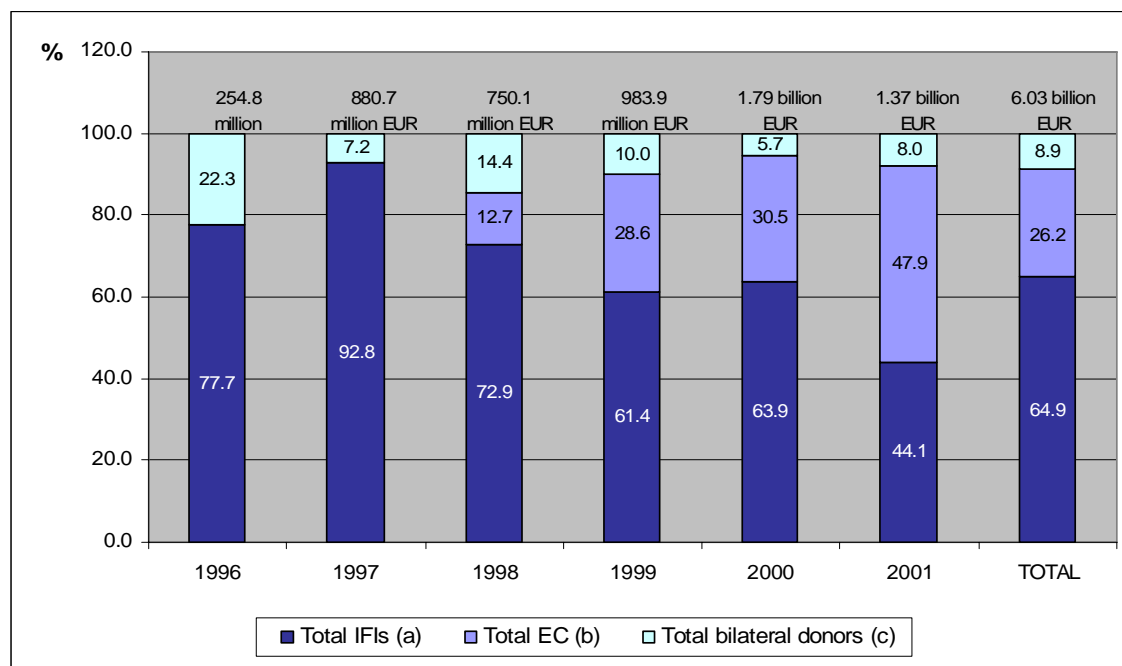
Annex 4 presents some data on the total environmental protection investments and the environmental expenditure by the public sector and industry during 1996-2000 in the Baltic accession countries. It is difficult to identify a trend during the years but there is a clear difference in investment level between the countries.

3.2 International resources

The international transfer of funds to the Baltic Sea countries originates from national bilateral funds, the different EU programmes providing support to the CEE and NIS countries and, the international financing institutions.

The total financial commitments for environmental issues in the CEE countries from the three mentioned group of partners from 1996 – 2001 are shown in figure 2.

Total environmentally related commitments to the Baltic candidate countries and Belarus, Russia and Ukraine in Million Euro (1996-2001) were already presented in table 1. The net Foreign Direct Investments (FDI) inflows to the CEE countries during 1996 – 2001 are shown in table 4.



Note: (a) includes data from EIB, EBRD, NEFCO and the WB; (b) 1996-1998 data not available; (c) excludes commitments from the EC;

Figure 2 Total Environmentally Related Commitments to the CEE Countries, by groups of donors in %, 1996-2001. Source: OECD (2003)

Country	1996	1997	1998	1999	2000	2001	Cumulative FDI inflows 1996-2001	Cumulative FDI inflows per capita 1996-2001	Average population in million 1996-2001
Czech Republic	1005	1125	3209	5851	4858	5385	21434	2081	10.3
Estonia	87	115	489	208	352	391	1642	1132	1.5
Latvia	299	454	271	311	432	217	1983	809	2.5
Lithuania	120	289	823	449	387	503	2571	695	3.7
Poland	2159	2683	4437	5958	8867	7265	31370	815	38.5

Source: Transition report 2001 and Transition report update, EBRD, May 2002.

Table 4 Net Foreign Direct investments (FDI) inflows to the CEE countries, 1996-2001, in Million Euro and cumulative FDI inflows per capita in Euro. Prepared from OECD (2003).

3.2.1 Bilateral donors

Grants for studies, training programmes and other investments from bilateral donors - notably Denmark, Finland, Germany, Norway and Sweden - have been vital in the preparation and implementation of individual environmental projects. Below is a brief introduction to the programmes of the bilateral donors.

Denmark

Denmark has provided support for the environment activities in Central and Eastern Europe since 1991. During the period of 1991 to 2003 Denmark has committed support for about 443 million Euro which has released a co-financing of 1.4 billion Euro.

- DANCEE

The Danish assistance has been provided through the Danish Environmental Support Fund for Eastern Europe and administered by the Danish Cooperation for Environment in Eastern Europe (DANCEE) which is part of the Danish EPA.

The programme supported technical assistance and investments. Priority areas were: water and air pollution, solid and hazardous waste, biological diversity and sustainable forestry and institutional strengthening and EU accession.

The budget in 2001 was 72 million Euro and about 60% was spent in the Baltic region and Northwest Russia. By the accession of the Baltic States and Poland to the EU the programme was closed down.

The financial support for Central and Eastern Europe continues with focus on Russia and Ukraine. For this neighbouring initiative about 114 million Euro has been reserved for 2004-2007.

- The Environmental Investment Facility for Central and Eastern Europe (MIØ)

MIØ was established in 1995 as a separate facility under the Investment Fund for Central and Eastern Europe (IØ). The 1 January 2004 the Environmental Investment Facility for Central and Eastern Europe (MIØ) was merged into IØ.

The purpose of MIØ is to create a better external environment and better occupational health and safety conditions in Central and Eastern Europe and to ensure the transfer and creation of the necessary environmental technology in these countries by investing in commercially viable environmental projects in cooperation with Danish trade and industry.

IØ offers capital and advice to joint venture enterprises in Central and East European countries. IØ cannot, however, anymore co-finance new projects in the countries which became members of the EU in 2004.

Both large and small projects, including pilot projects, are eligible for IØ financing. This flexibility suits both the needs of Central and East European countries and the structure of Danish trade and industry. To be eligible, a project has to be financed in part by a Danish business partner. Green-field projects, expansion of existing projects and privatization of state-owned enterprises are eligible. Total Equity Capital (2004): 191 million EUR

- Export Credit Fund

The Export Credit Fund (EKF) aims to ensure Danish investors and companies against the risks in political and commercial risk markets. Guaranties can be provided in relation to export activities and large projects and guarantees for investments loans when a company establishes itself abroad.

Finland

The Finnish assistance has focused on the neighbouring countries since 1993. The assistance is provided through the Ministry of Foreign Affairs and the Ministry of Environment. Support is given to investment projects, project preparation, feasibility studies and technical assistance such as training, research, institutional building and studies.

Priority areas are: water protection (in particular the Baltic Sea) and waste water treatment in the Baltic countries and Northwest Russia. Finland also participates in Joint Implementation projects.

Financial support is provided within a Bilateral Grant Fund programme and co-financed projects in collaboration with the IFIs. Lately Finland has contributed to the activities of the NDEP (Northern Dimension Environmental Partnership) focusing on project development of the Northwest regions of Russia.

A dept-for-environment swap (Eco-conversion) programme with Poland ended in 2004. After the accession of the Baltic States to the EU the bilateral neighbouring cooperation has ended and focus has shifted to Russia and partly Ukraine and Belarus.

Germany

Germany is supporting the adaptation process both through its bilateral co-operation with the accession countries and in the framework of EU community programmes.

Germany has been actively contributing to both investments and consulting services. From 2000 to 2003, Germany provided a total of over 615 million euros in federal budget funds. A large percentage of this funding was allocated to environmental projects.

Via different programmes, the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) is supporting co-operation with the countries of Central and Eastern Europe, the Caucasus and central Asia. From 1992 to 2000, environmental protection projects in these countries were supported via the Federal Government's TRANSFORM programme, a support programme for providing technical assistance for Central and Eastern European countries and the Newly Independent States (table 5). Since 2000, the Federal Environment Ministry has operated its own advising-assistance programme in the area of environmental protection. To reduce cross-border environmental pollution, Germany is financing investment projects in eastern neighbouring countries.

Cross-border	11.055
New Independent States	7.401
Central and Eastern European countries	10.076

Table 5 Financial support for environmental protection from the TRANSFORM programme 1992- 2000. Numbers in thousand DM. Source: BMU (2003)

Norway

Two programmes are relevant for the Baltic Sea:

- Project cooperation with Russia where the majority of funds goes to the Barents region and only a small part is allocated to NEFCO and,
- The Norwegian Plan of Action for the EU Candidate Countries.

The Plan of Action for the candidate countries aims at authorities, NGO's and the business sector in order to strengthen to cooperation with Norway. Environment and sustainable development is one priority area and runs from 2001-2006. The programme provides means for institutional and capacity building, feasibility studies and technical assistance. It does not support investments.

Norway has supported the Polish Ecofund (a dept-for-environment swap) co-financing investments in reduction of air pollution, water contamination, land reclamation, biodiversity and waste management.

Sweden

The Department for Central and Eastern Europe of the Swedish International Development Cooperation Agency (SIDA-East) coordinates the environmental assistance. The Central and Eastern European Programme of the Swedish EPA also provides technical assistance within capacity and institutional building to the Baltic region.

The Swedish environmental initiatives in the Baltic Sea region began in 1989 as part of a special Poland project. After the adoption of the Baltic Sea Joint Comprehensive Environmental Action Programme (JCP) in 1992 the Swedish Parliament allocated funds to support the implementation of projects in Eastern European countries close to Sweden. The cooperation with Poland was phased out in 2002.

Together with JCP the Agenda 21 for sustainable development in the Baltic Sea region (Agenda 21) forms the framework for assistance that was transferred to SIDA in 1995. Important areas of cooperation are waste water treatment, waste management, energy efficiency, district heating and institutional development. Sweden also finances projects in partnership with the World Bank.

Country	Projects	Special Government Funds	Total
Estonia	139		139
Latvia	4565		4565
Lithuania	1620	1480	3100
Russia	3949	3330	7279
Ukraine	272		272
Cooperation Swedish EPA -environmental authorities in Baltic States	3636		3636
Support in legal matters: Russia and Ukraine	70		70

Table 6 SIDA allocations 2002. Amounts in 1000 Euro. Source: SIDA. Recalculated from SIDA using an exchange rate of SEK/Euro of 9.90

3.2.1.1 Amount and quality of bilateral funding

The committed amount of environmentally related financial support provided by the bilateral donors is illustrated in table 7 and figure 3, which shows the distribution between donor countries. The annual commitments by donors 1996-2001 are provided in Annex 5.

Country	1996	1997	1998	1999	2000	2001	Total
Czech Republic	1.5	2.3	3.0	2.5	6.0	4.0	19.2
Estonia	7.3	9.5	11.1	10.8	11.6	12.2	62.5
Latvia	12.5	7.8	17.1	13.8	14.6	12.6	78.5
Lithuania	8.4	9.2	15.3	14.7	12.0	16.6	76.1
Poland	14.2	22.3	36.6	22.4	19.7	15.4	130.6

Table 7 Bilateral environmentally related commitments to the Baltic countries, 1996-2001 (million Euro).
Source: Prepared from OECD (2003) based on OECD CRS database, donors and IFI reporting

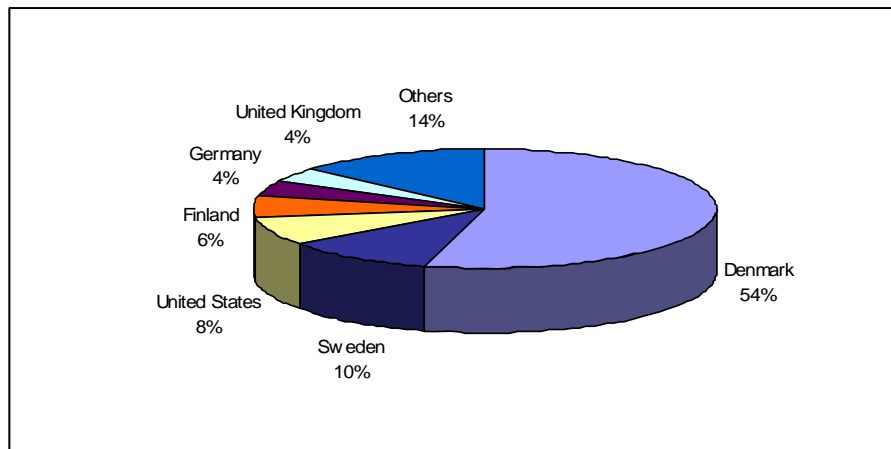


Figure 3 Share of Bilateral Environmentally Related Commitments to the CEE countries, by donor countries in %, 1996-2001. Source: OECD (2003) based on CRS database and donors reporting.

Furthermore figure 4 illustrates the commitments related to environmental issues or media. Heavy investment areas are “Water” i.e. water supply and sanitation and “Environmental policy” i.e. policy development, institutional strengthening and technical assistance.

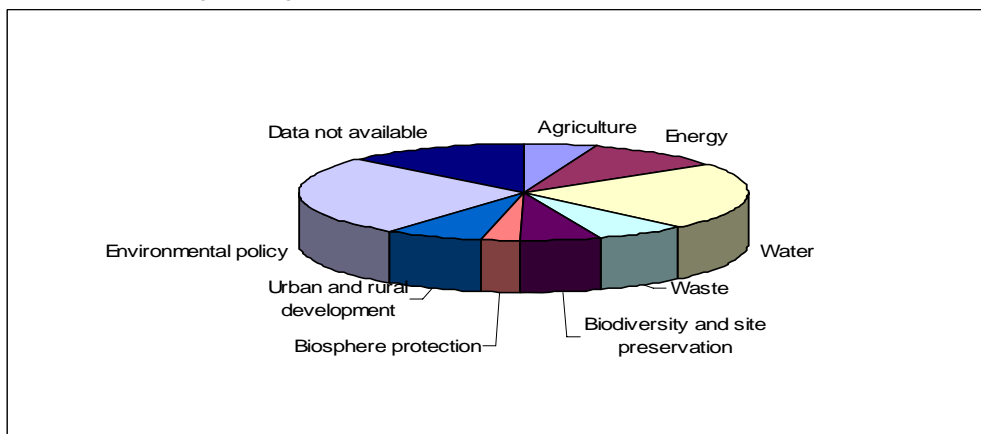


Figure 4 Bilateral Environmentally Related Commitments, by environmental media, 1996-2001. Source: OECD (2003) based on OECD CRS database and donors reporting

3.2.2 European Union programmes

While most of the financial instruments are limited to the member states of the European Union, several instruments have funded actions in the non-member states of the Baltic Sea region. The European Commission provides extensive grant-based financial support to help the transitional countries to prepare and implement projects, though external funding programmes. There are three pre-accession instruments to help the applicant countries in the preparations for joining the European Union. These are the Phare, the ISPA and the SAPARD programmes:

Phare

The Phare programme started in 1989 as a programme providing technical assistance (TA) to Poland and Hungary. Later it changed to provide support to the Czech and the Slovak Republics, Estonia, Latvia, Lithuania and Poland. The programme is accession-driven i.e. it concentrates on priorities for accession. It allocates 30% for TA incl. twinning

projects and 70% for investment in integrated regional development programmes, mainly in the more impoverished regions of the applicant country.

Phare operates with National Programmes, which account for about 80% of the budget. The Cross-border Cooperation Programmes accounts for an additional 10% of the budget. The last two sub-programmes: Multi-beneficiary Programmes and Multi-country programmes have minor importance

The Phare programme provides about 11 billion Euros for institutional building, twinning, technical assistance and investment support during the period of 2000-2006. In 2001 Phare had an annual budget of 1,560 MEUR.

Large Scale Infrastructure Facility (LSIF)

In 1998 the Large Scale Infrastructure Facility (LSIF) was launched within the framework of Phare. The objective was to provide co-financing to projects with a cross-border impact on the environment and transport sectors. The second year focused entirely on environmental investments, in particular provision of waste water treatment infrastructure and TA in project preparation. Investment projects were often co-financed with IFIs and the EU spent 151.4 MEUR for the environment through the LSIF. The LSIF was the precursor for a new financing programme named Instrument for Structural Policies for Pre-Accession (ISPA).

ISPA

ISPA supports large environment and transport infrastructure projects and has an annual budget of 1,040 MEUR of which 50% are allocated for environmental and 50% for transport infrastructure projects. Environmental investments supported under the ISPA programme include investments in public infrastructure for drinking water, wastewater, solid waste management and energy services contributing to the implementation of the EU environmental acquis.

Financing is given as first-come, first-served basis. ISPA can provide up to 75% co-financing for environmental projects with a minimum budget of 5MEUR, which has caused problems for the smaller countries. There has been cooperation with bilateral donors on project preparation and implementation including co-financing.

SAPARD

SAPARD was established in 1999 and finances agricultural and rural development from an annual budget of 520 MEUR (2001) with earmarked allocations per recipient country. It is possible to finance environmental protection at farm-level, agricultural water resource management, forestry, and land improvement. The Commission has been working on establishing national SAPARD administrations since 2001.

In addition to the three pre-accession instruments also the following programmes are of interest to the Baltic Sea region:

Tacis

Tacis supports the process of transition to market economy and democratic societies in the Newly Independent States (NIS) and Mongolia. Of interest to the Baltic Sea are Belarus, Russia and Ukraine.

Financial support is provided via two sub-programmes: Specific National Programmes decided according to the country's particular needs and Multi-Country Programmes both of which are designed to support projects of more than 1 million Euro. Multi-Country Programmes consist of the Regional Cooperation Programme, the Cross-Border Cooperation Programme (CBC) and the Nuclear Safety Programme. Under the National Programmes are Small Project Programmes and under the CBC a Small Project Facility where the EC co-financing cannot exceed 80% of the total eligible costs.

During the first 8 years of operating since the creation in 1991 Tacis has committed a total of 4,226 million Euro for projects funding.

LIFE

LIFE finances environmental protection and nature conservation in line with EU policies. Projects are invited through an open tendering process and financing is generally up to 50% of project costs.

SAVE

SAVE finances projects for the rational use of energy, environmental protection and nature conservation in accordance with EU policies. Projects are invited through an open tendering process and financing is generally up to 50% of project costs.

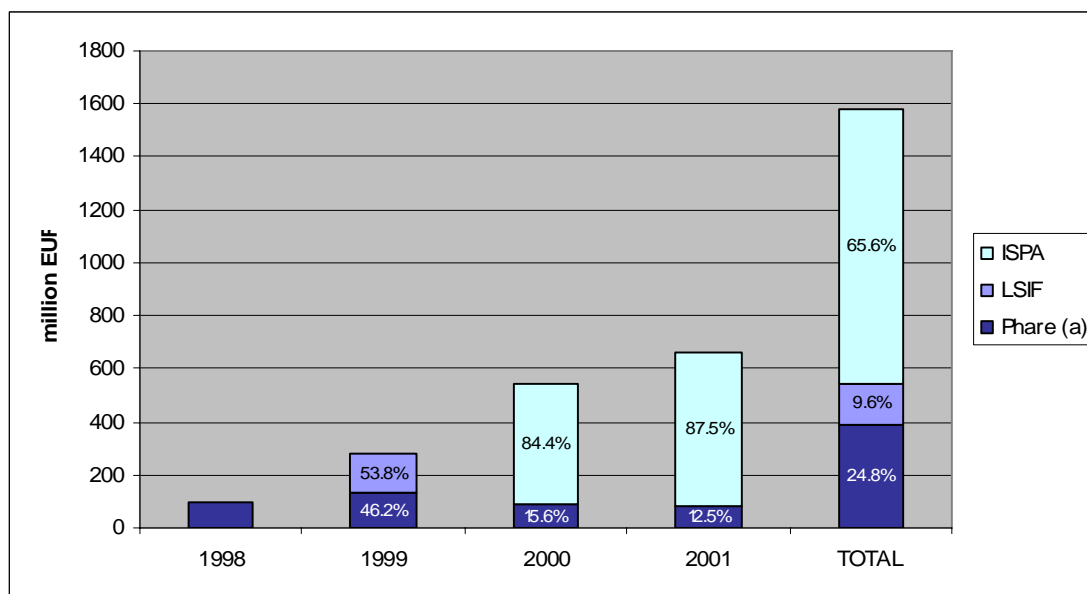
Just before 2000 the European Commission began to decentralise the administration of some of these assistance programmes to the central governments in the accession countries, which can be seen as an attempt to build up local capacity to successfully administer post-accession Structural Funds and agricultural support facilities. Between the date of accession and the end of 2006, the Union may provide temporary financial assistance, known as the "Transition Facility", to the new Member States to develop and strengthen their administrative capacity in certain areas through action, which cannot be financed by the Structural Funds.

After accession of the three Baltic States and Poland to the EU by 1st of May 2004 several of the national bilateral programmes have been changed. The idea is that the funding is taken over by the usual EU programmes. Anyway there seems to remain a financial gap.

3.2.2.1 Amount and quality of EU funding

Figure 5 shows the relative importance of the 3 major EU programmes supporting the CEE countries. The ISPA programme starting in 2000 had a major impact on funding and substituted the LSIF programme. More information on EU and ISPA funding is found in Annex 6.

The Tacis programme has been very important for the NIS countries and the allocation of funds from 1991-2002 is shown in the table in Annex 6. Also the Tacis funds related to sectors are shown in the Annex.



Note: (a) Includes commitments within Phare National Programmes only.

Figure 5 EC's Environmentally Related Commitments to the CEE Countries, by type of assistance programme, 1996-2001. Source: OECD (2003).

3.2.3 International Financing Institutions (IFIs)

The IFIs provide loans, guarantees and other types of support to finance priority investments. Affordable, low-interest soft loans for environmental investments aim to encourage government action.

Several IFIs have been involved in the political and funding process in Central and Eastern Europe and have had a major impact on the developments. The following banks should be mentioned: the European Bank for Reconstruction and Development (EBRD); the European Investment Bank (EIB); the Nordic Environment Finance Corporation (NEFCO); the Nordic Investment Bank (NIB); and the World Bank.

The European Bank for Reconstruction and Development (EBRD)

The EBRD aims to promote an open market-based economic system in the transitional countries. The EBRD provides direct financing for private sector activities, restructuring, privatisation and infrastructure projects. The EBRD usually requires a sovereign guarantee for public sector loans, but also aims to promote private sector involvement in public sector operations. The focus is shifting from sovereign loans to private sector transactions, and finding ways to enhance the creditworthiness of borrowers is increasingly important. The EBRD have co-financed several water and wastewater projects, some of which are priority pollution hot spots.

The EBRD has specific programmes to assist municipalities in financing environmental infrastructure and to finance decommissioning of nuclear plants

The European Investment Bank (EIB)

The EIB is the European Union's financing institution. The EIB supports financially viable public and private sector projects in infrastructure, industry, agro-industry, energy, environment, tourism and services beneficial to the private sector.

The EIB is a major shareholder in the European Investment Fund (EIF), which was created in 1994 as a public-private partnership focusing on extending guarantees for Trans-European Network infrastructure projects and development of

small and medium scale enterprises. The EIB and EIF operate within the European Union and in selected transitional countries. EIB generally requires State guarantees under these lending programmes

The EIB is a major financier of water and wastewater investments and has provided extensive support to several countries, including the partial financing of projects that have enabled pollution hot spots to be removed from HELCOM's hot spot list. The EIB has also co-financed with the World Bank several major investments to reduce air pollution through improved energy efficiency and the rehabilitation of district heating systems.

The Nordic Investment Bank (NIB)

The NIB is a multilateral financial institution owned by the five Nordic Countries. By 1 January 2005 also the three Baltic States became partners of the bank and this will widen the geographical scope of the bank with intensified cooperation with Russia, Ukraine and Belarus.

NIB grants loans for public and private sector environmental investments. The NIB finances projects that promote Nordic co-operation, with high priority given to projects improving the environment in the Nordic Countries and neighbouring regions. Projects involving Nordic suppliers and co-financing from other Nordic and multilateral financing institutions are given priority. Loans are offered to governments or other public finance institutions on a market based interest.

NIB has been active in Estonia, Latvia and Lithuania since the independence in 1991 first with the Baltic Investment Programme (BIP) established in 1992 consisting of a loan arrangement, technical assistance and investments in financing institutions. Later on NIB continued with its normal financing loans for major projects. The BIP- programme ended in 2000.

In 1996, a new 100 million Euro environmental loan facility was established at the NIB to support the financing of environmental projects in the Baltic Sea region and northwestern Russia. These loans are guaranteed by a special fund set up by NIB shareholders, and are intended for wastewater treatment, solid and hazardous waste management and district heating projects.

The NIB has financed successful municipal and industrial environmental projects that have enabled several industrial hot spots to be deleted from the JCP hot spot list. The loan engagement in the three Baltic States has grown during the last ten years and amounts today to more than 600 million Euro.

The Nordic Environment Finance Corporation (NEFCO)

The Nordic countries established the NEFCO in 1990. NEFCO is a multilateral risk capital institution that finances environmental projects in Central and Eastern European countries. NEFCO aims to improve environmental conditions in the partner countries and the Nordic region, with the emphasis on air and water pollution. NEFCO can take part in projects through equity investments, and by offering loans and guarantees. Because it is funded with budgetary appropriations from the Nordic countries, NEFCO is not dependent upon sovereign guarantees from creditworthy borrowing countries. A Nordic partner should be involved in all NEFCO projects.

NEFCO operates several funds:

- NEFCO Investment Fund

The Investment fund amounts to approximately 113.4 million Euro. The fund provides loans and equity financing. In some cases subordinated loans and loans with equity features can also be provided. The loans are from medium to long term, and are provided on market conditions.

- Nordic Environmental Development fund

Through this fund, originally established by the Nordic Ministers of Environment in 1995, NEFCO is endeavouring to support the realization of projects that otherwise would not materialize or could be realized only later in the future. Local participation in the financing is required. Contributions from the fund can be provided as grants for the procurement of goods or services (cash subsidies) or to reduce the borrower's debt service costs. The maximum grant is one-third of the total project cost. The capacity of the fund is approximately 40 million Euros.

- **Testing Ground Facility**

The Baltic Sea Region Testing Ground Facility (TGF) established in 2003, is a fund, which provides financial assistance to projects, primarily by purchasing emission reduction credits. The fund has an aggregate capital of 10 million Euros.

- **Cleaner Production Revolving Facility**

The Revolving Facility for Cleaner Production provides loans for small-scale projects that reduce risk to human and the environment. The loans range from approximately 50 000 to 350 000 Euro and have a fixed interest rate. The projects are required to have a rapid payback.

NEFCO has financed more than 30 projects that have impacts on the Baltic Sea, including support for municipal water and wastewater projects at pollution hot spots, in co-operation with the EBRD and the World Bank. NEFCO has also financed three types of smaller-scale projects: modernisation schemes at industrial plants and energy utilities; improvements in municipal environmental services; and the manufacture of environmental equipment or the provision of environmental and energy consulting services. In Annex 7 is shown some of NEFCO investments per country and per sector.

The World Bank Group

The World Bank Group operates in the Baltic Sea region through the following organisations: the International Bank for Reconstruction and Development (IBRD), which supports public and private sector investments; the International Finance Corporation (IFC), a private sector lending affiliate which works with local, foreign and joint venture investors, the Multilateral Investment Guarantee Agency (MIGA), which provides investment guarantees against political risk to foreign investors; and the Global Environmental Facility (GEF) which provides grants for environmental projects.

The World Bank has supported policy, institutional and investment activities related to environmental management in the Baltic Sea region. Projects have focused on water, wastewater and solid waste management services, including support for the demonstration of small-scale wastewater treatment alternatives, the management of pig farm wastes, and agricultural non-point source pollution. The World Bank has also supported significant projects in coastal zone management, coastal lagoon and wetland management, the development of protected areas, and eco-tourism. Projects supported by the World Bank have included co-financing from the EU (Phare), the Nordic Countries and NEFCO.

In addition to the financing organisations mentioned above the Council of Europe Development Bank (CEB) has been participating in the implementation of the JCP under the Helsinki Commission.

The Council of Europe Development Bank (CEB)

The CEB grants loans to finance social projects or to respond to emergency situations, aiming to improve living conditions and social cohesion in less advantaged regions. Aid to refugees, migrants and victims of natural or ecological disasters is prioritised, but some 27% of the CEB's loans have been granted for social projects in the fields of environmental protection, rural modernisation, and the preservation of historic heritage.

3.2.3.1 Amount and quality of IFI funding

The IFI's commitments for environmental projects from 1996 – 2001 are illustrated in figure 6. The level of activities varies between the recipient countries. No clear trends are seen apart from year 2000 where several countries have an increase in commitments, which may be related to the commencement of the ISPA programme.

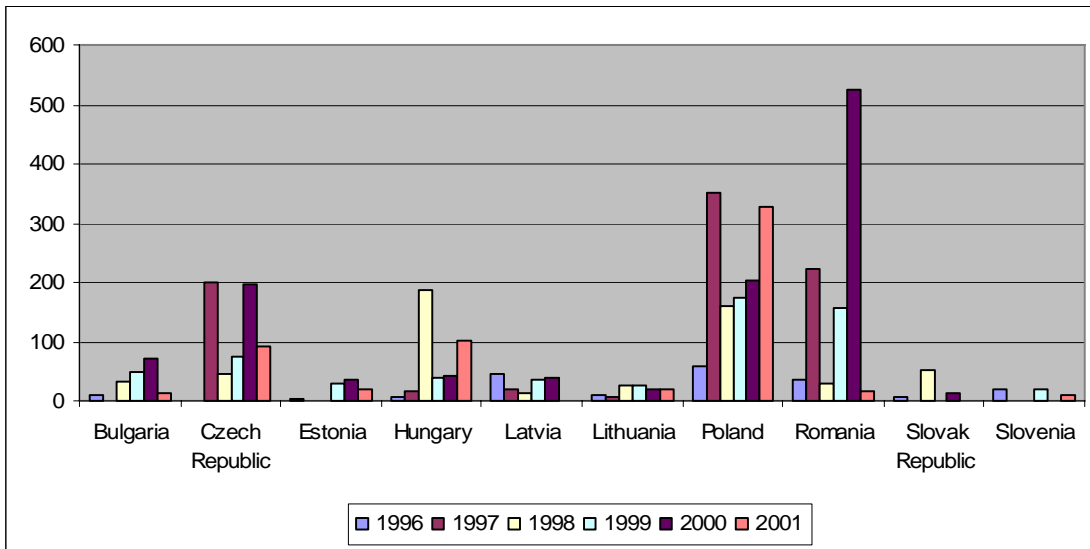


Figure 6 IFIs' Environmentally Related Commitments, by recipient countries, 1996-2001. Source: OECD (2003) based on OECD CRS database and IFIs reporting

The relative sizes of the IFI's contributions are shown in figure 7. The European Investment Bank has contributed by more than half of the funds followed by the EBRD as the second largest contributor.

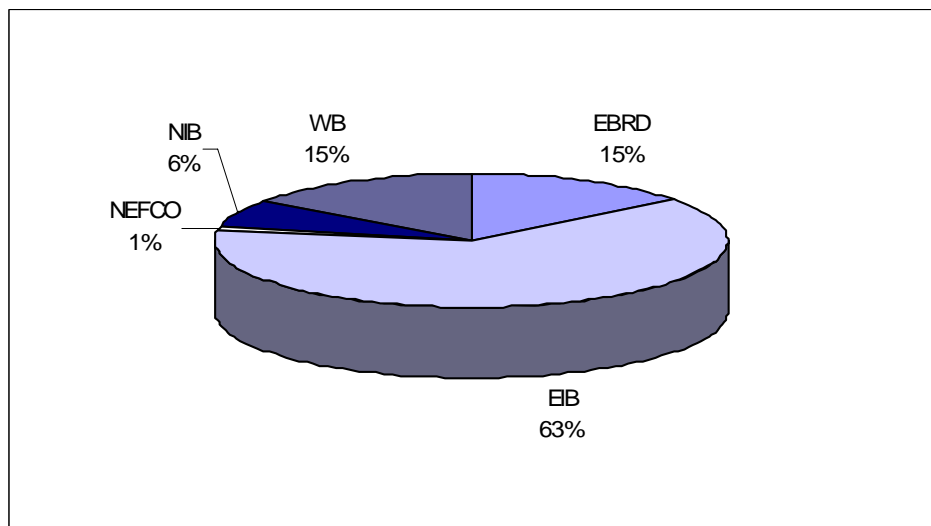


Figure 7 Share of Environmentally Related Commitments Provided by Individual IFIs in %, 1996-2001. Source: OECD (2003) based on OECD CRS database and IFIs reporting

The distribution of commitments between environmental issues or media is shown in figure 8. Urban/rural development has received a major part of the funding but like the bilaterally provided commitments also Water and Environmental policy plays an important part of the activities funded by the IFIs.

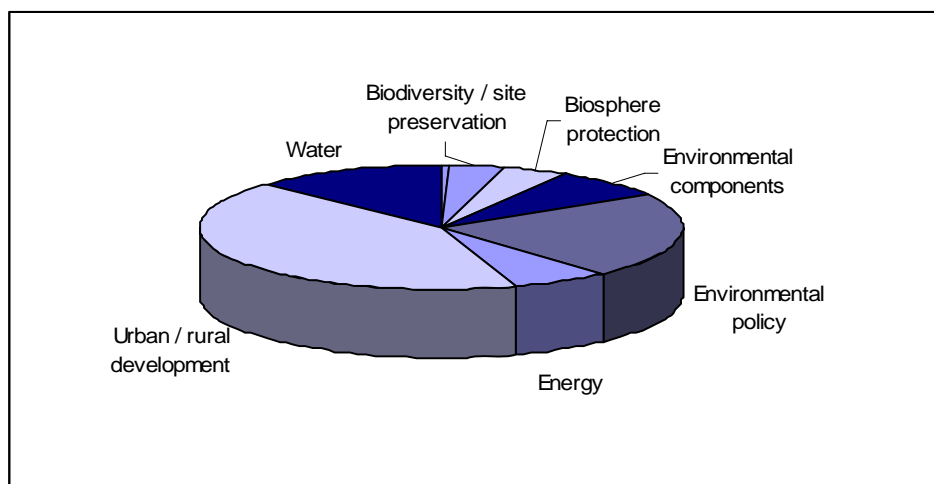


Figure 8 IFIs' Environmentally Related Commitments to CEE, by environmental media, 1996-2001. Source: OECD (2003) based on OECD CRS database and IFIs reporting

Conclusions

Financing of environmental investments in the Baltic Sea countries has been possible due to sustained political commitment at high political level. Several political initiatives and processes have helped to develop a shared vision of actions and programmes.

The direct involvement of International Financing Institutions has made it possible to develop a strong partnership between the co-operating parties.

In the recipient countries where affordability has been and still is a critical constraint on investments the use of co-financing combining loans and grants from IFIs, the European Union and bilateral donors has been vital.

The model of co-financing has allowed developing larger projects with greater environmental impacts and reducing the effective costs. Co-financing has also helped to reduce unfavourable impacts on the populations in terms of adjustment of tariffs for services.

The investments in improved environmental management and administration, in direct investments in environmental infrastructure and in modern installations has been resulted in clear reductions of pollution loads to the air and water environment and first of all improved living conditions for millions of people living around the Baltic Sea.

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Annex 1 The political development processes 1973 – 2005

Year	HELCOM	EU accession	Environment for Europe	Northern Dimension	EU funding
1973-74	Convention				
1989	Liberalisation in Eastern Europe				Phare
1990	Ronneby - declaration				
1991		Poland signs Europe agreement	Dobris Castle		Tacis
1992	Helsinki - JCP approved				
1993	Gdansk -Mobilising conference		Lucerne		
1994					
1995		Estonia, Latvia, Lithuania sign Europe agreement	Sofia		
1996					
1997					
1998			Århus		LSIF
1999		Environmental screenings			SAPARD
2000		Opening of negotiations		Feira – European Council. ND Action Plan	ISPA
2001				IFI and donors support. Creation of NDEP and Support Fund	
2002	JCP – 10 years			Support Fund operational	
2003			Kiev		
2004		Full membership			
2005					

Annex 2 Macroeconomic Indicators in some of the Baltic Sea Countries.

	Population 1000	GDP at market prices billion Euro	Real GDP growth %^b	GDP per capita in PPS at market prices Euro		GDP per capita in PPS EU 15 = 100	Inflation rate Annual average %
	2001 ^a	2001	1997-2001 average	1995	2001	2001	2001
Czech Republic	10295	63.3	1.1	9830	13280	57	4.5
Estonia	1367	6.2	5.2	5370	9800	42	5.6
Latvia	2366	8.5	6.1	4080	7720	33	2.5
Lithuania	3494	13.4	3.6	5780	8730	38	1.3
Poland	38644	196.7	4.2	3790	9210	40	5.3

Note: (a) on 1st January, (b) at constant prices (national currency), per cent change over the previous year. GDP: Gross Domestic Product, PPS: Purchasing Power Standard.

Prepared from: UN ECE (2003) based on Eurostat, New Cronos database, December 2002.

Annex 3 Estimated investment needs in the Baltic Sea countries

Country	Source	Total (million Euro)	Per capita (Euro)
The Czech Republic	The World Bank (1999) Czech Republic. Toward EU Accession. Washington DC.	6600-9000	642-876
	RIVM, EFTEC, NTUA, IIASA (1999) European Environmental Priorities: an Integrated Economic and Environmental Assessment.	9400	914
Estonia	Estonian Ministry of Environment, July 2000.	4406	3216
Latvia	Latvian Ministry of Environment, July 2000	1480	807
	Latvia Regular Report (1999).	2360	991
Lithuania	RIVM, EFTEC, NTUA, IIASA (1999) European Environmental Priorities: an Integrated Economic and Environmental Assessment.	1600	432
Poland	The World Bank (2000) Poland Toward EU Accession. Washington DC	22100-42800	571- 1107
	RIVM, EFTEC, NTUA, IIASA (1999) European Environmental Priorities: an Integrated Economic and Environmental Assessment.	24900	644

Estimated investment needs in the Baltic Sea countries in million Euro and Euro per capita. Prepared from: UN Economic Commission for Europe (2003).

Annex 4 Total environmental protection investments and the environmental expenditure by the public sector and industry during 1996-2000

Country	1996	1997	1998	1999	2000	Public Expenditure 2000 (Million Euro)	Share of total expenditure 2000 (%)
Czech Republic	35	33	29	29	29		
Estonia	6	6	8	7	12	17	25
Latvia	-	1	1	1	0	1	2.5
Lithuania	4	5	5	4	3	12	9
Poland	-	-	34	34	36		

Note: Czech Republic: investment only; Latvia: 1997-99 investment only

Table 1 Trend in public environmental expenditure in the Baltic accession countries (Euro per capita) 1996-2000 and public expenditure in 2000 and as % of total expenditure. Prepared from: The Regional Environmental Center for Central and Eastern Europe (2003).

Country	Total investments 1996-2000 1)				Public sector expenditure					Industry expenditure 2)				
	Billion Euro				Million Euro					Million Euro				
	Waste water	Air	Waste	Total	96	97	98	99	00	96	97	98	99	00
Czech Republic	1.25	2.35	0.46	4.31	-	-	-	-	-	-	-	-	-	-
Estonia	0.12	0.04	0.02	0.20	9	9	11	11	17	32	57	57	48	44
Latvia	0.03	0.01	0.00	0.04	-	-	-	-	1	-	-	-	-	9
Lithuania	0.13	0.02	0.01	0.19	16	20	19	14	12	-	40	31	34	45
Poland	3.78	4.59	0.70	9.20	-	-	1314	1315	1409	-	-	-	-	1301

1) Data for all sectors and years are not available. However, available data suggests that the effects on the totals are negligible. Missing data: Lithuania: specialised producers 96-97 and industry 96; Latvia: all sectors 96; Poland: specialised producers 96-99.

2) Poland: Excluding manufacturing for current expenditure

Table 2 Total environmental protection investments during 1996-2000 as well as the expenditure by the public sector and industry. Prepared from Eurostat (2002)

Annex 5 Bilateral environmentally funding to the Baltic Sea countries by donors and year

Funds allocated to Estonia. Amount in 1000 Euro

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Denmark	2031	2712	8193	6413	9126	6532				
Finland	3666	5064	780	2480	2465	456			1683	128
Germany	15				18	40				
Norway	708	973	426	12	172					
Sweden		401	1064	1115	393	2538	139			
EU ISPA					15808	17345				
EU Phare			6331	2000	4500	800				
Total*	6512	9196	16794	12070	32599	29186				

Funds allocated to Latvia. Amount in 1000 Euro

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Denmark	2917	2819	10350	9835	9244	9779				
Finland	2778	3541	2540	940	1159	64			497	50
Germany	108	36	964	54	48	37				
Norway	1061	187	189	192						
Sweden	4859	14	2684	1814	1722	1239	4565			
EU ISPA					26568	25834				
EU Phare			4860		2000					
Total*	11724	6597	21661	12848	42664	38117				

Funds allocated to Lithuania. Amount in 1000 Euro

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Denmark	7339	5551	9723	9895	7911	10258				
Finland		2627	1178	1779	160	975			461	126
Germany	94	113	154	168	2	77				
Norway	756	898	686	1202	1476	50				
Sweden	27		1047	112	879	450	3100			
EU ISPA					18200	35676				
EU Phare			6969	3494	2000	9162				
Total*	8216	9206	19757	16670	30628	57812				

Funds allocated to Poland. Amount in 1000 Euro

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Denmark	6674	10440	11780	12848	12767	12234				
Finland			811			22			-	-
Germany	5476	239	110	1335	1952	100				
Norway	281	537	12			270				
Sweden	1386	6041	41	6617	67	648	-			
EU ISPA					13298 8	22802 2				
EU Phare			27627	50989	27760	21920				
Total*	13888	17631	55054	72496	17675 7	26594 7				

Funds allocated to Russia. Amount in 1000 Euro

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Denmark	5075	9991	7031	10920	13789	14281				
Finland	10196	17128	1449	2822	768	271			3099	510
Germany	1303	349	468	4712	4629	755				
Norway	9443	17818	3714	8307	6262	5763				
Sweden	230	1422	5585	21681	4844	19366	7279			
EU ISPA				60						
EU Phare		656	664	697	884	812				
Total*	31993	57929	32725	65417	58519	70240				

*) Total also includes other bilateral donors (France, Netherlands, Switzerland, United States and UNDP).
The data material from 2002 – 2005 is incomplete.

Table 1 Source: OECD (2005), Finland (2005) and SIDA

Donor	1996	1997	1998	1999	2000	2001	Total
Austria	0.58	0.65		0.54	7.77	2.57	12.12
Canada	1.55	0.08	1.42		2.30	0.32	5.67
Denmark	25.58	31.66	55.67	57.39	57.63	64.14	292.08
Finland	6.50	11.23	5.48	5.24	2.76	1.52	32.72
France	0.25	0.95	1.17	0.87	0.21	1.97	5.41
Germany	6.34	0.53	4.04	3.38	4.96	1.96	21.20
Italy		0.13				3.74	3.87
Japan			11.91				11.91
Netherlands						14.08	14.08
Norway	2.81	2.60	1.31	1.41	1.64	0.42	10.18
Spain			0.02	0.18	0.13	0.13	0.46
Sweden	8.08	12.62	13.64	12.15	4.28	4.89	55.66
Switzerland		2.21	0.55		3.04	3.70	9.50
United Kingdom	5.24	0.53	2.55	3.92	6.60	1.73	20.57
United States			19.04	4.40	10.30	8.86	42.59
Total	56.92	63.18	116.80	89.50	101.61	110.03	538.03

Table 2 Bilateral environmentally related commitments to CEE countries, by donors, 1996-2001 in million Euro. Source: OECD (2003) based on OECD CRS database and donors reporting

Annex 6 EC's environmentally related commitments to the candidate countries by assistance programmes

Programme	1996	1997	1998	1999	2000	2001	Total	Total (%)
Phare			95.2	129.8	85.1	82.3	392.4	24.8
LSIF				151.4			151.4	9.6
ISPA					460.8	575.9	1036.8	65.6
Total			95.2	281.2	545.9	658.2	1580.6	100.0

Note: (a) Includes commitments within Phare National Programmes only.

Table 1 EC's environmentally related commitments to the CEE countries by type of assistance programme, 1996-2001. Source: OECD (2003) based on EC Reporting to the OECD, EC -DG Regional Policy ISPA, 2002, Phare Annual Reports 1998-2000, European Commission.

Country	2000		2001		Total
	Million Euro	for environment %	Million Euro	for environment %	Million Euro
Bulgaria	52.0	50.0	44.9	42.0	96.9
Czech Republic	27.8	39.4	26.1	39.0	53.9
Estonia	15.8	56.0	17.3	58.0	33.2
Hungary	43.8	49.8	42.6	46.9	86.4
Latvia	26.6	56.8	25.8	53.8	52.4
Lithuania	18.2	34.8	35.7	70.7	53.9
Poland	133.0	43.3	228.0	56.1	361.0
Romania	120.6	50.4	122.8	50.0	243.4
Slovakia	11.6	27.3	23.4	48.6	35.0
Slovenia	11.4	57.8	9.3	58.0	20.6
Total ISPA – Environment	460.8	46.2	575.9	51.9	1036.8
Grand total ISPA	997.5	100.0	1109.2	100.0	2106.7

Table 2 EC's Environmentally Related Commitments to the Candidate Countries within the Framework of the ISPA Fund (million Euro) 2000 -2001. Source: OECD (2003) based on EC -DG Regional Policy ISPA, 2002

The allocation of Tacis resources, 1991 – 2002

Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total
Baltics*	15,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	15,0
Belarus	8,9	14,6	9,0	7,0	12,0	0,0	5,0	0,0	0,0	5,0	0,0	0,0	61,6
Russia	212,0	111,0	160,8	150,0	161,2	133,0	132,9	139,7	101,0	92,0	90,0	90,0	1.573,5
Ukraine	28,7	48,3	43,3	50,5	72,5	76,0	59,0	44,0	46,0	73,0	108,0	87,0	736,2
Regional Programmes**	106,0	88,6	172,0	131,5	124,5	152,0	135,0	155,8	129,4	122,4	118,0	128,5	1.563,7
Donor Coordination***	0,0	34,9	21,0	24,7	40,0	43,0	37,0	43,0	44,4	48,0	40,4	35,0	411,4
Programme Implementation Support and others****	6,2	24,0	11,1	31,0	33,0	48,5	46,4	31,9	33,5	47,2	21,8	22,0	356,6

*The Baltic States have benefited from Phare since 1992; ** Includes the Inter-state, nuclear safety, cross-border cooperation and Baltic Sea programmes; *** Includes EBRD Bangkok Facility, Partnership and Coordination Programme, International Science and Technology Centre; **** Includes Coordinating Units, information, monitoring and evaluation and possible other costs

Table 3 Tacis funds committed by country 1991 - 2002 (in million Euro). Source: Commission of the European Union (2005)

Sector	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Nuclear safety and environment	53,00	60,00	100,00	88,00	108,00	141,50	98,00	118,53	84,09	851,12
Restructuring state enterprises and private sector development	37,50	79,64	94,46	78,66	72,40	55,20	60,92	61,41	55,05	595,24
Public administration reform, social services and education	103,00	42,28	79,91	63,55	99,40	55,70	44,75	73,20	70,57	632,36
Agriculture and food	79,95	60,54	32,19	41,58	48,33	18,50	26,50	20,10	17,06	344,75
Energy	65,00	38,96	38,00	43,70	42,35	45,80	43,90	38,85	24,70	381,26
Transport	49,80	33,19	32,77	22,80	21,10	43,00	20,70	34,30	20,90	278,56
Telecommunications	0,00	6,76	6,65	4,10	7,90	6,40	7,30	0,00	15,00	54,11
Policy advice and SPPs	0,00	37,80	8,00	41,08	0,00	61,01	55,32	25,90	36,00	265,11
Others*	2,05	0,83	48,02	40,53	48,71	28,39	52,88	10,56	8,88	240,85
Donor Coordination**	0,00	34,88	20,98	24,69	40,00	43,00	37,00	81,62	56,00	338,17
Programme Implementation Support***	6,20	24,03	11,11	20,99	23,00	37,50	34,46	42,77	39,30	239,36
Total	396,50	418,91	472,09	469,68	511,19	536,00	481,73	507,24	427,55	4.220,89

*Includes the Democracy Programme and miscellaneous; **Includes International Science and Technology Centre, Partnership and Coordination Programme and the EBRD Bangkok Facility; ***Includes Coordinating Units, Multidisciplinary fund, information and monitoring and evaluation

Table 4 Tacis funds allocated by sector 1991 - 1999 (in million Euro). Source: Commission of the European Union (2005)

Annex 7 IFI's environmentally related commitments to the CEE countries 1996-2001

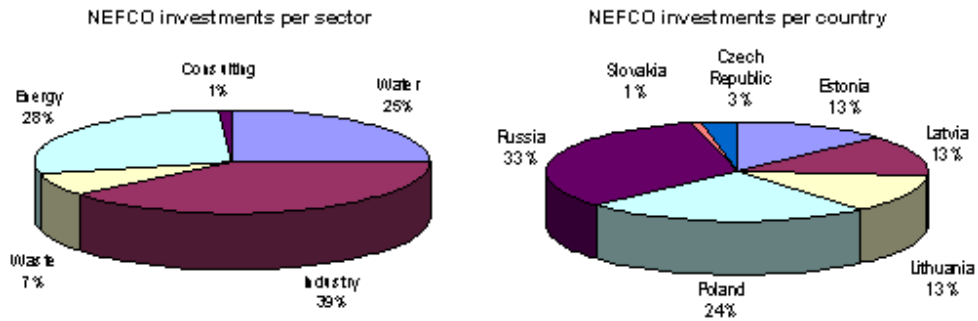
Country	1996	1997	1998	1999	2000	2001	Total	Total assistance	% of total assistance
Bulgaria	8.3	0.0	33.3	48.6	72.3	14.7	177.2	396.6	44.7
Czech Republic	0.0	200.5	46.1	76.1	195.7	92.0	610.5	724.0	84.3
Estonia	3.0	0.5	1.6	30.9	36.8	20.0	92.8	215.1	43.2
Hungary	5.4	16.1	186.3	38.9	43.0	103.0	392.7	524.3	74.9
Latvia	46.3	20.0	12.8	35.3	40.3	1.5	156.2	313.0	49.9
Lithuania	10.7	5.4	25.0	27.3	19.2	19.1	106.6	272.6	39.1
Poland	59.1	349.8	159.2	172.6	202.7	328.9	1272.2	1921.0	66.2
Romania	37.2	224.0	29.6	156.1	523.3	17.7	988.0	1371.4	72.0
Slovak Republic	6.7	1.0	53.3	0.0	12.0	0.0	73.1	170.0	43.0
Slovenia	21.1	0.0	0.0	18.4	0.0	10.1	49.6	129.4	38.3
Total CEE	197.8	817.5	547.0	604.3	1145.2	607.0	3918.9	6037.4	64.9

Table 1 IFIs' environmentally related commitments to the CEE countries by recipient country, 1996-2001, million Euro. Source: OECD (2003) based on OECD CRS database and IFIs reporting

	1996	1997	1998	1999	2000	2001	Total	%
EBRD	42.2	157.2	52.2	78.0	168.7	71.4	569.7	15
EIB	41.0	575.0	281.0	299.5	778.0	484.1	2458.6	63
NEFCO	7.8	3.7	13.1	8.9	9.1	7.2	49.7	1
NIB	0.0	33.5	72.9	90.0	34.0	18.4	248.8	6
WB	106.8	48.1	127.8	127.9	155.4	25.9	592.1	15
Total	197.8	817.5	547.0	604.3	1145.2	607.0	3918.9	100

Table 2 Share in environmentally related commitments to the CEE countries, by individual IFIs, 1996-2001, million Euro. Source: OECD (2003) based on OECD CRS database and IFI reporting

NEFCO Investment Fund



Nordic Environmental Development fund

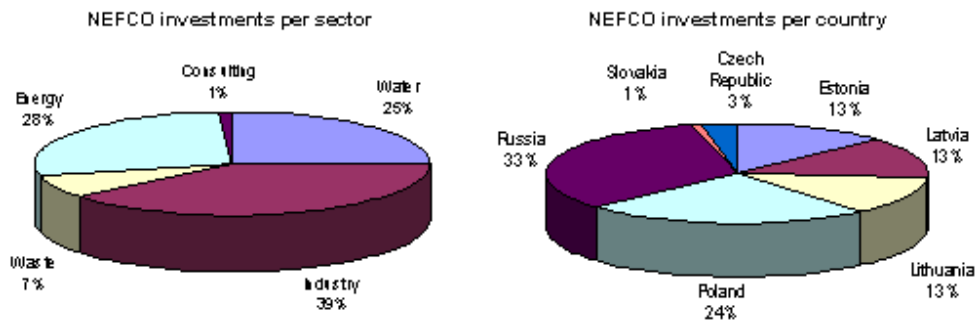


Figure 1 General Statistics of NEFCO administered Investment Fund and Nordic Environmental Development Fund. Source: NEFCO homepage