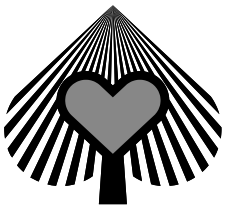

MINISTRY OF THE ENVIRONMENT OF THE CZECH REPUBLIC

ECONOMIC INSTRUMENTS OF ENVIRONMENTAL POLICY IN THE CZECH REPUBLIC

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1. 1 Background

Economic development in the Czech Republic similarly in other CEE countries based on structural change from a state directed economy to a free market has probably brought about the most positive results of all transition economies. In the second half of the 1980´s, all countries of CEE found themselves in poor economic conditions, with stagnating or falling output, rising inflation, shortages of some goods and services and often unsustainable levels of external debt. These internal and external economic imbalances, with threatening social consequences, required urgent stabilization programs to prevent economic and social crises and to prepare the ground for fundamental institutional reforms. In these circumstances, the economic programs adopted in most of these countries included both institutional reforms and stabilization programs.

A number of stabilization programs were based on the standard approach to economic adjustment. They were oriented toward limiting state interference in the economy by means of reducing subsidies, liberalizing prices and deregulating economic activities. In doing so, they enlarged the room for market relations. The programs typically included strong deflationary measures in the form of monetary and fiscal restrictions. Institutional changes focused on foreign trade liberalization, introduction of some degree of convertibility, privatization of public enterprises and reform of the financial sector.

Privatization is one of the two main pillars of the reform. While privatization is understood to be the most significant internal element of transformation, the opening of the economy to the outside world can be regarded as the most important external element of this process.

The Czech government also took into account the social and environmental aspects of transition from a centrally planned economy towards a market one. Compared to the world standard, Czechoslovakia was even worse off. The development and conditions at the end of 1989, according to the basic environmental quality indices placed Czechoslovakia as the most affected country in Europe. The environment in some regions could have been described as disastrous. The atmosphere, water and food were polluted, the quality of the soil was deteriorated, most of the forests were seriously affected, the landscape was devastated in many places and has lost its ecological stability and living nature suffered. According to European standards, the Czech Republic was one of the biggest exporters of pollution transported by the atmosphere, rivers and other means to the neighboring and more distant countries. A warning signal was the drop in the average life expectancy (one of the last positions in Europe).

The change to a market economy enabled relatively rapid success and rate of progress of economic reform with a decisive influence on the environment. The objective of economic development was to bring prosperity to all. Modern society has determined, that the free application of market forces is the basis for a healthy economy, but these forces must be effectively defined with the aid of laws. There is a very important policy development, particularly in its emphasis to complement legislation with the use of market-based instruments to change environmentally-damaging behavior.

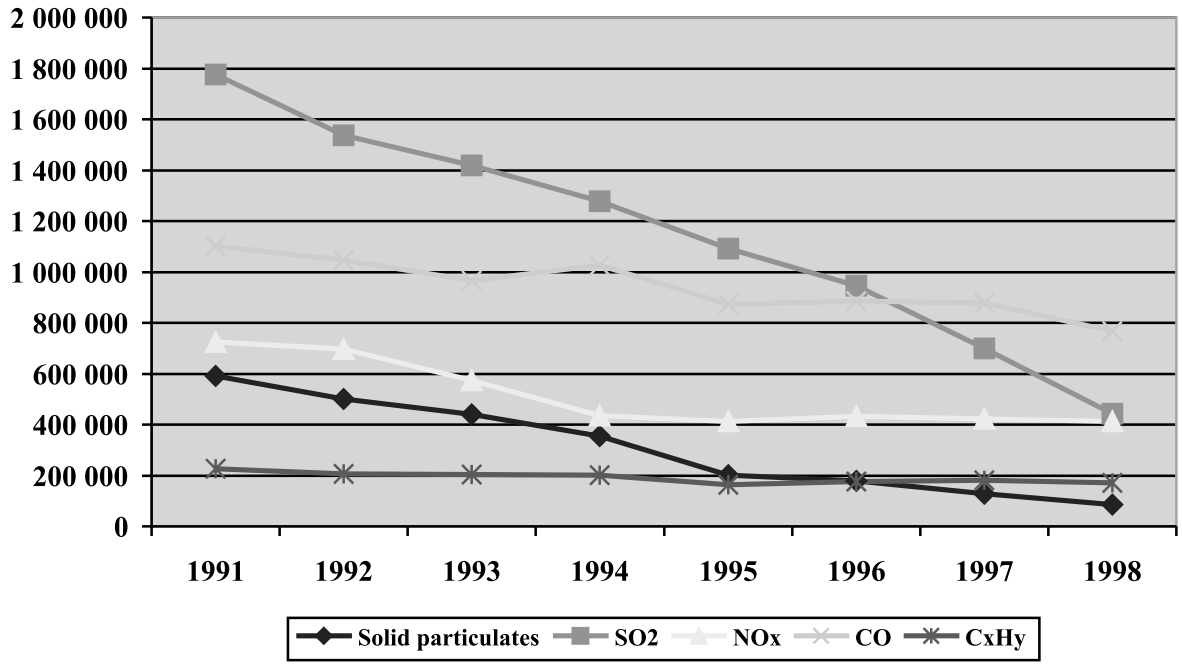
Since 1990 the Czech government has been engaged in a number of activities to protect the environment. These activities represent an essential part of the activities in the transition period, because environmental problems are in the same way as economic problems. At the beginning of the reforms, legislation covering the principle needs of a market economy and environmental protection was established. Later, legislation is continuing to be rewritten in accordance with the requirements for accession to the European Union and OECD standards. To implement and enforce the new legislation, the government institutional framework has changed substantially.

In conjunction with the economic development of the 90´s the state of the Czech Republic's environment has shown a very strong trend to become healthier. For example a strong fall was visible in poor air quality (Graph 1). This is very important, because clean air was one of the top priorities in the state environmental policy in the Czech Republic. Between 1990-1999 total emissions of sulfur dioxide fell by 49,6 %, emissions of nitrogen oxides fell by 42 % and dust emissions fell by 71,6 %. Emissions of carbon monoxide decreased by 16 %. In addition, concentrations of sulfur dioxide and dust in the atmosphere decreased and concentrations of nitrogen oxides stagnated over this period.

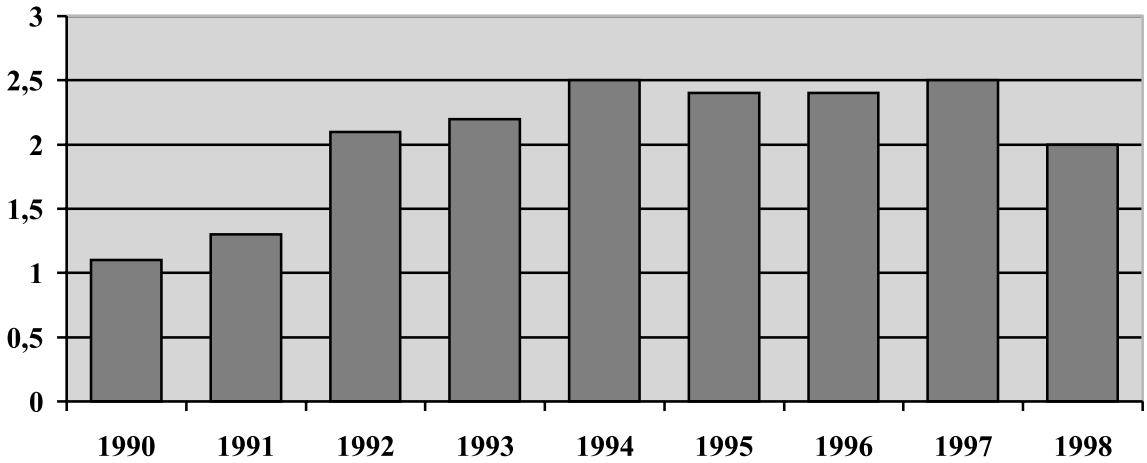
The environmental policy programs are chara-cterized by a gradual transition from corrective to preventative measures, from normative to econo-mic/market measures and from a component to a sector approach. The priorities of these programs have emphasized the protection of human health, the promotion of energy savings, the efficient management of natural resources, the identification of solutions which create benefits for the environment and the economy, and a gradual adjustment of consumption and production patterns.

Usually governments use a lot of financial sources in the field of environmental improvement. The Czech republic attained this first phase in the 90´s because a number of new laws for the protection of the environment were passed in 1991 and 1992. There were relatively high environmental expenditures. The proportion of environmental investment from GDP (Graph 2).

Graph 1 – Total emissions of major pollutants by source category (tons per year)



Graph 2 – Percentage of gross domestic product spent on environmental investment (in %)

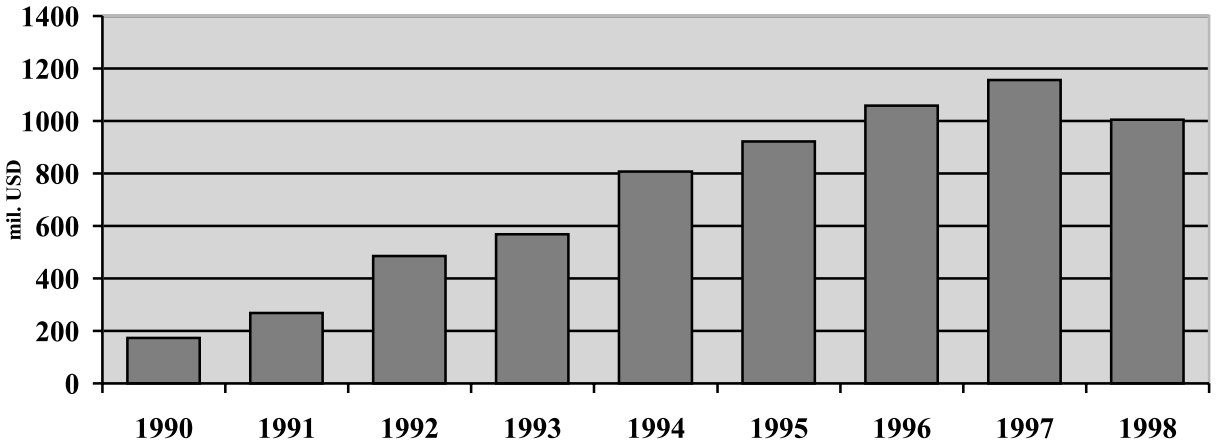


The reason for this high indicator is without a doubt the relatively strong air protection law with a compliance deadline for the end of 1998. That's why we look forward to decreasing environmental investment. Another important indicator of this change in behavior is the amount of investment for protection of the environment (Graphs 3,4,5).

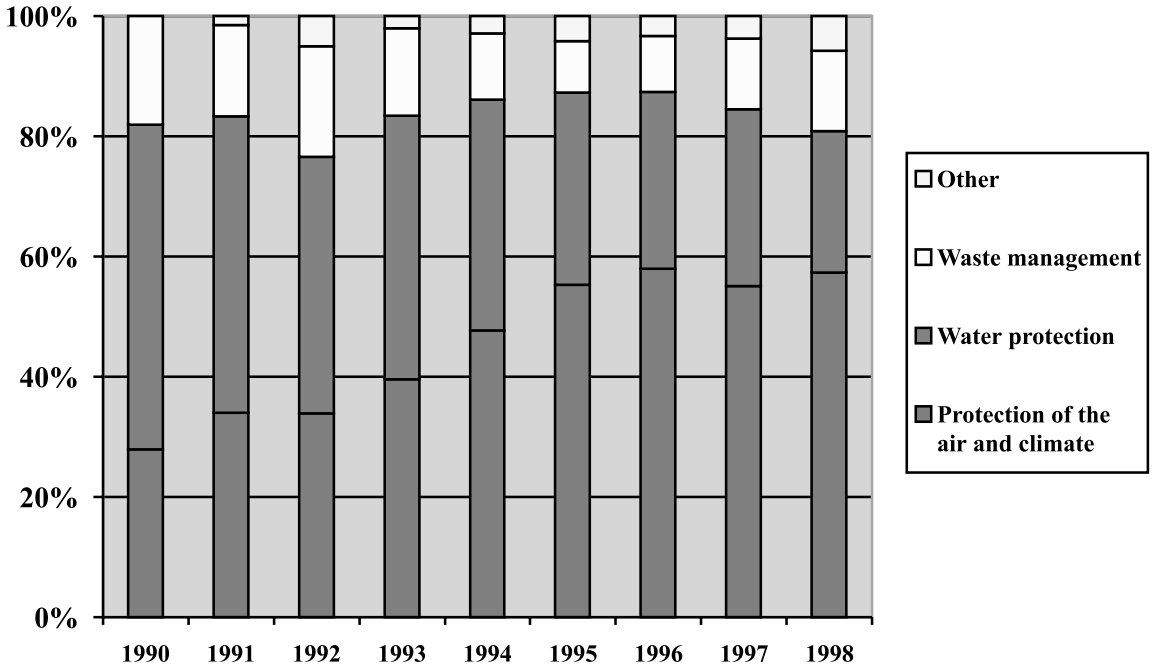
The current environmental policy of the Czech Republic is implemented through a set of legal provisions which establish normative, economic, informational and institutional instruments (in conjunction with international commitments), through institutions of State administration, which operate in the area of the environment, and through institutions which provide expert support to the State administration. The implementation of environmental policies is supported by the State budget, the State Environmental Fund and the National Property Fund. The fundamental objective of the State environmental policy is to systematically improve the quality of the environment in the Czech Republic and to aim towards sustainability.

Market mechanisms can only function effectively in those instances where ownership relations may be

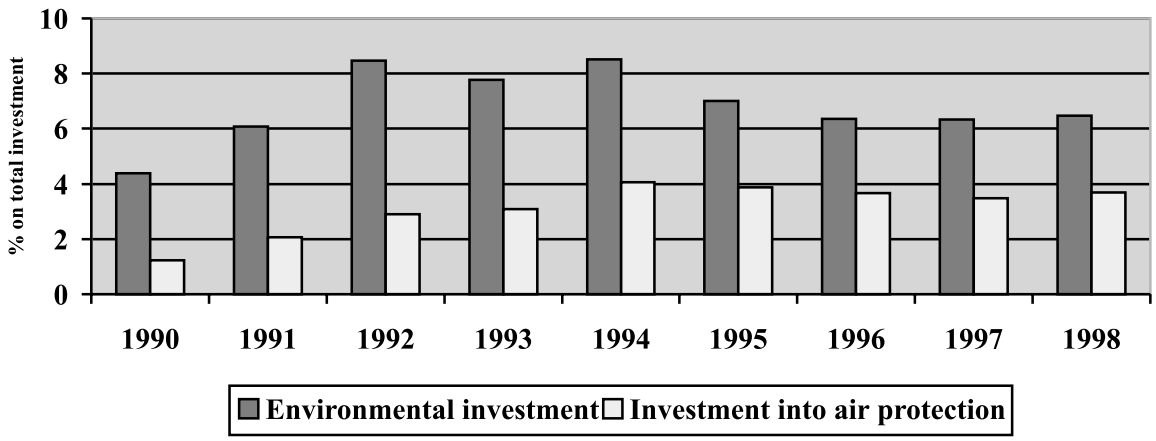
Graph 3 – Total environmental investment in mil. USD



Graph 4 – Composition of environmental investment (in %)



Graph 5 – Share of environmental investment on total investment (in %)

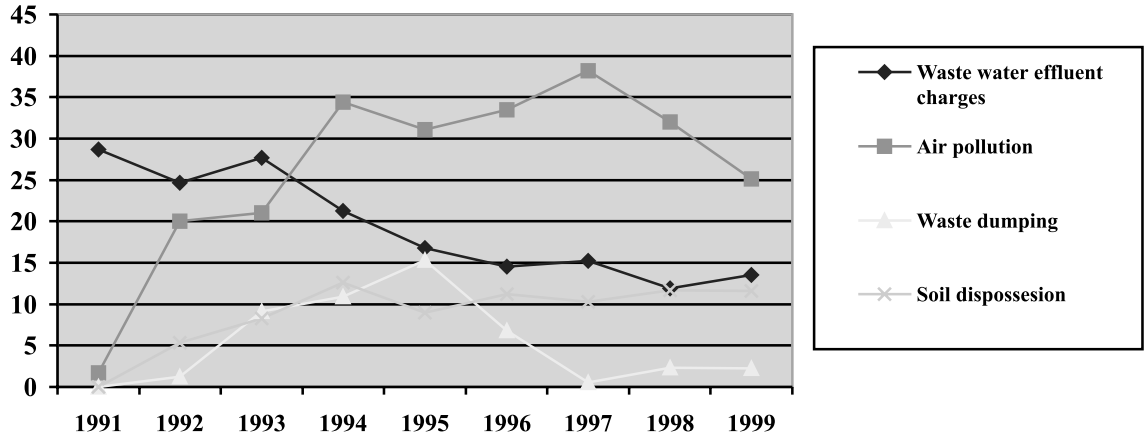


defined and/or negative external effects ignored. Ownership relations in some components of the environment, such as protection of the soil, water reservoirs, etc., can be easily defined and preservation in these areas is provided under the protection of ownership. The role of the State in these areas is to develop the respective legal and institutional framework to facilitate such protective arrangements. On the other hand, the State has a primary obligation to protect those components of the environment where ownership relations are difficult to define and/or those cases where external negative effects are produced and affect the public. Therefore, State participation in the protection of the environment is are essential where the components of the environment represent common goods which cannot be owned and/or where it is impossible to exclude the use of these goods (namely, the air, the climate, significant water courses and ecosystems) and where international commitments must be observed. The State is responsible for determining the optimal functioning of market mechanisms through normative and economic instruments and may also initiate the introduction of new mechanisms (e.g. tradable emission permits).

The factors which support the implementation and enforcement of the environmental policy document are as follows:

1. The speed and degree to which the transition to a market economy has produced positive results. The process of economic transformation has contributed, by the removal of the centrally controlled economy, to the renewal of market relations, the restructuring of the industrial sector towards production processes which are less demanding on energy and natural resources and improvements in the state of the environment.
2. The necessity to develop an adequate legal and institutional framework for applying civil law to protect those components of the environment whose character is appropriate for such legal action. The completion of the privatization process creates basic conditions for the broad implementation of civil law approaches to the protection of the environment.
3. The need to increase the efficiency of environmental protection policies and to incorporate economic principles in these policies. The primary objective between 1990 and 1994 was to terminate as quickly as possible those policies, which led to further deterioration of the environment, and to immediately introduce policies which would lead to improvements. Therefore, policy instruments were implemented depending on how quickly they would become effective.
4. The necessity to implement economic policies which will induce changes in production and consumption patterns and encourage desirable behavior towards the environment. In conjunction with the environmental policies of the developed countries, emphasis will gradually be shifted from normative to economic and informational instruments which will contribute towards changes in production and consumption patterns.
5. The need to support entrepreneurial activities in the environmental protection area and the introduction of environmentally friendly technologies. In the developed countries, the development and trade of equipment, technologies and services for environmental protection has surged over the last decade. It has been estimated that, on a world scale, the market for such equipment and technologies (especially air and water protection and waste management) will reach the value of approximately USD 250 billion in 1995.
6. To facilitate the Czech Republic's accession to international organizations and harmonize the CR legal system with developed countries. Environmental problems are increasingly becoming central issues for the international community and they frequently receive priority on the agendas of international organizations both within and outside of the UN system. This trend is reflected in the activities of international bodies such as the UNEP and the UNCSD. Practically all developed countries have formulated their environmental policy in the form of a government policy document as evidenced by the European Union's ongoing formulation of environmental action programs (the fifth EU program was completed). The evaluation of a state's environmental policy, legal norms and environmental standards is a critical element for consideration in the admission process to international organizations (especially with regard to the admission procedures of the OECD and the European Union).
7. To comply with and respond to new developments and recommendations stemming from important international activities and events. The Czech Republic supports both global and regional commitments made at numerous international environmental conferences and is actively involved in offering ongoing support and follow-up to these commitments. The most important of these conferences for the CR were the UN Conference held in 1992 in Rio de Janeiro, the 1993 ministerial conference "Environment for Europe" held in Lucerne, the 1994 ministerial conference "Environment and Health for Europe" held in Helsinki and the 1995 ministerial conference "Sustainable Production and Consumption" held in Oslo. In addition, an important contribution made by the Czech Republic to this process was the sponsorship of the 1991 ministerial conference, held in Dobříš and the 1995 symposium "Economic Instruments for Sustainable Development " held in Průhonice near Prague.

Graph 7
Expenditures for protection of the environment and drinking water from central sources, 1992 – 1999 (mil. USD, current prices)



Notes:*1) In the year 1997, 1998 and 1999, budget expenditures on drinking water preparation were excluded from environmental protection expenditures.
*2) Up to 1996 only State Environmental Fund, however the share of other state funds is almost negligible.

The role of the Government in the implementation of its environmental policy consists of the following responsibilities:

1. Amending the existing legal provisions and drafting new legislation so as to establish new normative, economic, informational and institutional instruments for environmental protection.
2. Direct channeling of financial flows (the State budget, the State Environmental Fund and the National Property Fund).
3. Indirect channeling of financial flows (the private sector).
4. Guaranteeing international commitments and obligations.
5. Addressing the remedying of old environmentally damaged sites is inadequate.

The Czech government has supported environmental protection primarily through economic instruments and measures. The economic instruments used in the care of the environment are some of the instruments of the state's environmental policy, that serve to enforce the concern of environmental protection. The importance of these tools increases in the period of transition to a market economy, although administrative instruments have played their role in the first part of the transition period by removing excessive contamination of the environment in the CEE countries.

The most important instruments are pollution charges, which afflict and so motivate polluters to take measures which ensure pollution reduction. Another function of charges is to provide fiscal income and to enable financial support of actions and measures which improve cleanliness. One of the other significant instruments are subsidies from public resources.

In addition, the system of economic instruments also includes tax relief for products and activities which meet environmentally-friendly criteria and allocations from the State budget. Tax relief for these environmentally-friendly products and activities includes: reduced VAT taxes, temporary relief from income taxes, relief from real-estate tax, temporary relief from road taxes, differentiation of single remissions. Currently, with regard to the prevailing price regulation of commodities important to the environment, no special taxes (carbon, energy taxes) have been introduced to promote the efficient allocation of their use.

2. Economic instruments

In the current state environmental policy besides traditional regulatory or "command and control" policy instruments, economic and market orientated instruments are increasingly used for the following reasons:

- economic instruments allow for more effective and efficient state environmental policy
- implementation of environmental taxes can help to solve current macro-economical problems because these taxes support technical innovation, decrease costs and support the growth of domestic products' competitiveness on the market
- economic instruments ensure financial sources for public budgets (they support the state budget or are earmarked as financial means for financing special programs of environmental protection).

[1)] For recalculation between national currency (CZK) and the USD was an exchange rate 39 CZK/USD used

Pollution charges have been gradually introduced since the 60´s. Air emission charges were introduced in 1967, and wastewater charges for effluent into surface waters were instituted in 1979. However, in the centrally planned economy they played no significant role. The current system of economic instruments in environmental policy in the Czech Republic was introduced in the early 1990´s during the process of establishing state environmental policy and legislation.

The current system of environmental charges includes:

– Air emission charges;
– Sewage charges;
– Water pollution charges;
– User charges on municipal waste:
– Charges on solid waste disposal;
– Water extraction charges for the withdrawal of water from surface and ground water;
– Charges for dispossession of agricultural and forest land;
– Mining charges.

2.1. Air emission charges

Emission charges on air pollution from large and medium sources

Even if emission charges on air pollution from large and medium sources should provide incentives for measures to reduce pollution, the main function is fiscal. The charge was introduced by the act. No. 389/1991 Coll., on state administration of air protection and charges for its pollution, currently in the wording of act No. 211/1993 Coll., 158/1994 Coll. and 86/1995 Coll.. The charge has been in force since 1.1.1992.

There are two source categories charged:

– large sources: thermal units above 5 MW and most important technologies (e.g. production of coke, steel and iron, cement, oil etc., heavy chemistry, waste incineration, etc.);
– medium sources: thermal units within the range 0.2 MW to 5 MW and other technologies.

From the revenue point of view, the sulfur dioxide charge is the leader, in second place are solid emissions revenue. The revenue goes to the State Environmental Fund (SEF) and is used to finance programs related to air pollution. The charge is paid by the operator of the emission source and the charge for emissions under a given limit can be included in costs (and thus in the price of production). If the charge exceeds the given limit, there is an additional charge added (see the non compliance section).

Emission charges on air pollution from small-scale business polluters

The subjects of the charge are small-scale (thermal units not exceeding 0,2 MW) business polluters (non-households). The charges are levied on the basis of fixed fees for different source types

Air emission non-compliance fee

The aim of this instrument is to provide economic incentives for compliance with prescribed emission limits

The rates are related to the damage to the environment and are divided by the pollutant (rates in USD rounded):

– main pollutants: solid emissions (particulates)	3 000 CZK/t	(USD 77/t)
SO_2	1 000 CZK/t	(USD 26/t)
NO_x	800 CZK/t	(USD 21/t)
CO	600 CZK/t	(USD 15/t)
hydrocarbons	2 000 CZK/t	(USD 51/t)
– I class pollutants (e.g. asbestos, cadmium, mercury, benzene, etc.)	20 000 CZK/t	(USD 513/t)
– II class pollutants (e.g. arsenic, chlorine, phenol, tin, etc.)	10 000 CZK/t	(USD 256/t)
– III class pollutants (e.g. ammonia, acetone, toluene, etc.)	1 000 CZK/t	(USD 26/t)
– hard freon	200 000 CZK/t	(USD 5 128/t)

Emission charges on air pollution from small-scale business polluters, USD

	heating system performance		
type of levied fuels	**0-50 kW**	**50-100 kW**	**100-200 kW**
coke, firewood, heating oil with 0,3 – 1 % sulphur	0	0	0
light heating oil	10-21	21-32	32-44
other heating oils	18-36	36-54	54-72
brown coal, derived fuels	13-26	26-38	38-51
hard coal	26-51	51-77	77-103
power plant brown coal	51-103	103-154	154-205
sludges, shales	256	256-513	513-1026

Source: Act No. 158 / 1994 Coll.

for air pollution sources. The fee has been in force since 1.1.1992. The fee is levied on the basis of pollutants (related to output in the case of small sources). The rates are related to environmental damage. In case the prescribed emission limit is exceeded, the total amount of standard charges is multiplied by a factor of 1,5 (= 50 % increase). Again, the amount of the regular charge can be included in costs, the 50 % surcharge must be paid from polluters profit.

The revenue goes to the SEF (except those from small pollution sources, which remain with the respective local fund for environmental purposes) and is used to support programs related to clean air activities.

2.2. The water sector

Charges for the withdrawal of water from surface water-sources and ground water

Extraction from surface water sources: The charge is part of a permit system and has to be paid by each subject consuming water above the permitted limit. The permitted limit is 15 000 m^3 yearly or 1 250 m^3 monthly. Exceptions include water taken for ponds, swimming pools, fire-fighting purposes, skating rinks, and military use. Public water supply is not subject to payments. Each of the present five "Povodí" (River Basin) Enterprises has a different rate constructed on the base of operational costs and rightful profits. The revenue goes to the SEF. It is used as a financial support for the River Basin Enterprises for measures and activities aimed at the protection of water sources.

Extraction from ground water sources: The charge is part of a permit system. Each subject taking ground water in a volume exceeding the permitted limit – more than 15 000 m^3 yearly or 1 250 m^3 monthly – pays USD 0,05 per m^3. Exceptions include water taken for water supply system, housing estates supply system, and military use. Public water supply is also not subject to payments. In total, no charges are paid for about 90 % of extracted ground water. Charges go to SEF and are used to finance the protection of ground water reserves.

Sewage charges

Charges are paid by all users of sewerage and should work as a reimbursement of real costs for public water service and waste water collection/treatment. The charge is usually included in the cost of drinking water. The rates are determined by the public utilities "Vodovody a kanalizace" which cover different areas.

Water effluent charges

These charges were established to stimulate water polluters to construct waste water treatment plants, and also to create well-balanced economic conditions between subjects with waste water treatment plants and those without plants; to generate income. Since July 1998 there is a completely new system of water effluent charges (Act. 58/1998 Coll., on water effluent charges).

The charge is levied on selected pollutants listed in the annex of the relevant act. The charge is paid in case the pollution exceeds concentration and mass limits at the same time. Both these limits are also in the annex of the act. Some selected charges are valid from 2000, 2001, 2004 and 2005 respectively.

Charges listed in the table below are reduced by 40 % for 1999 and by 20 % for 2000 and 2001, so the full charge rate will be in force from 2002.

The system of waste water charges also includes a charge for the amount of waste water, which is paid in case the total annual amount of waste water exceeds 30 000 m^3, the polluter has to be a subject of the waste water charge at the same time. The charge rate is USD 0,003 per each m^3 of waste water.

Waste water charges, concentration and mass limits

pollutant	charge **USD/kg**	mass limit **kg/year**	concentration limit **mg/liter**
chemical consumption of oxygen, non treated waste water, till 31.12.2004	0,4	20000	40
chemical consumption of oxygen, non treated waste water, from 1.1.2005	0,4	8000	40
chemical consumption of oxygen, treated waste water	0,2	10000	40
chemical consumption of oxygen, treated waste water from pulp, paper and textile production	0,08	10000	40
dissolved inorganic salts	0,013	20000	1200
non dissolved substances	0,05	10000	30
total phosphorus, till 31.12.2004	1,8	13000	3
total phosphorus, from 1.1.2005	1,8	3000	3
N-NH4+, till 31.12.2000	1	15000	15
Nanorg, from 1.1.2001	0,8	20000	20
AOX,from 1.1.2001	8	15	0,2
mercury	513	0,4	0,002
cadmium	103	2	0,01

If the polluter plans to or has already started building a waste water treatment plant, he can ask for postponement of the charge for up to one year. If the polluter, after the waste water treatment plant was put into operation, fulfills the required limits on pollution, the postponed amount of charge will be excused.

If the charge (or advanced payment of the charge) is not paid by the given time, each extra day is fined by 0,1 % of the debt value.

The act also allows to impose a fine ranging from USD 26 to USD 1 282, the conditions under which the fine is imposed are listed in the relevant act (non measurement of the amount of waste water, not allowing independent controls, no measurement of pollutants in waste water for example).

The revenue from the waste water effluent charge in 1999 was USD 13,5 mil.

2.3. Waste

User charges on municipal waste

Citizens and other subjects are charged by the operator of a dump or an incinerator for municipal waste storage or disposal. The aim is the reimbursement of real costs for safe municipal waste disposal and consequently to provide incentives to reduce the volume of municipal waste. The charge rate is determined by the individual municipalities. The rates are calculated in such a way that they include the waste treatment, operating costs, the charges for solid waste disposal, and the operator's economic profit. The waste producer pays the waste treatment operator, and the operator returns the charges on solid waste to the SEF.

Charge rates on solid waste disposal – new charge system since 1998

	Basic charge in USD/t		Hazardous charge in USD/t
	municipal waste	hazardous waste	hazardous waste
1998	0,5	5	7,7
1999-2000	0,77	6,4	12,8
2001-2002	1,3	9	19,2
up to 2003	2	11,5	25,6

Charges on solid waste disposal

The aim is to compensate a municipality in whose district dumps are located. The "hazardous charge" component of the charge system has the function of stimulating the proper disposal of solid waste in dumps which correspond to the required criteria. The charge has been in force since 1.4.1992, amended in 1.1.1998. The charges are levied on the basis of different waste categories, each with a basic charge for waste disposal and hazardous charge for hazardous waste disposal. The rates are related to the damage to the environment.

2.4. Soil, forests, agricultural land

Charges for dispossession of agricultural land

The aim of the charge is to discourage the use of agricultural land, which is limited in the Czech Republic, for purposes other than agriculture. Agricultural land includes arable land, hop fields, vineyards, gardens, orchards, meadows and pastures. Each subject who occupies agricultural land for other purposes, either temporarily or permanently, has to pay the charge. Paying the charge has a compensatory character. It is primarily implemented in the awarding of permits which become stricter as the number of applications for agricultural land occupation grows larger. The computation is made in accordance with tables provided with the following two parameters:

- charge per ha according to so-called main units (78 units are determined)
- Distinctions are made according to climatic regions (9 regions are determined).

Charges computed in this way may be increased on the basis of environmental factors (multipliers to the basic rates exist within the range 5-20) in national parks and other protected areas.

Charges for dispossession of forest land

The aim of the charge is to discourage the use of forest land for any other purpose than forestry. The charge was instituted in autumn 1995 in connection with amendments to the Forest Law (289/1995 Coll.). Such a charge is very important because one third of the territory of the Czech Republic is covered by forests, which have not only an economic function in the production of wood, but also an increasingly recognized environmental role in water, air, and land protection, and in creating a natural environment for humans and for the life of plants and animals. The rate is derived from the production of wood (biomass) and by means of correcting coefficients according to the prevailing functions of the respective forest. There are three types of forests introduced by law:

- Protected forests in national parks, national natural reserves, in high mountains, and remote areas;
- Forests of a particular determination (in protected areas, in spa and urban surroundings, forests with intensive environmental functions);
- Economic forests.

Yearly charges for temporary sequestration of forest land from the forest domain are set by multiplying the average yearly production of wood (6,3 m^3/ha) by the average price of wood and by correcting with an environmental coefficient (1,4 for economic forests, from 2 to 5 for protected and particular forests). Charges for permanent sequestration of forest land from forest domain can be expressed with the following formula:

charge = (Q x P x C) / 0,02

whereas Q = average yearly production of wood (m^3)
P = average price of 1 m^3 wood
C = environmental coefficient (1,4 –5)
0,02 = discount rate

Besides these sequestration charges, from which 40% are paid to the municipality and 60% to SEF, the buyer of the forest land has to cover the economic value (loss) of forest land to the selling owner.

Mining charges

These charges are an economic compensation for the destruction caused by the exploration and extraction of raw materials. The charge has been in force since 1.1.1993. The charge is levied both on the extracting area and the extracted selected raw materials.

The charge level for the extracting area is USD 256 yearly per each km^2 started, or, up to 2 ha, USD 51 yearly. The charge can be included in costs and thus in the price of minerals sold. From the environmental point of view the height of the charge is negligible. The revenue goes to the municipal budget, where the mining space is located.

The charge level for extracted selected raw materials has the character of royalty and is max. 10% of the market price of the extracted raw materials. The fee in fact does not include any environmental criteria (except for differentiation between surface and deep pit mining)

2.5. Tax instruments

Value added tax

VAT is comparable to the system used in the European Community. The law levies two tax rates for goods and services: currently, the standard rate for goods is 22 %, with the exception of the special list of goods, which is subject to a decreased rate of 5 %. The reverse applies to services, where the standard rate is 5 %, except for those given on the list with a tax rate of 22 % (in 1997).

VAT rates for goods in the Czech Republic, 1994-1996 and 1997

VAT rates	standard rate	decreased rate
1994-1996	23 %	5 %
1997	22 %	5 %

A social approach was taken to select the goods with the reduced tax rate. Consequently, such items as food, solid fuels and heat energy have a lower tax rate. With regard to environmental protection the following goods were included on the list :

- Coatings and lacquers (including enamel and fine lacquers) based on synthetic polymers or chemically-modified natural polymers, dispersed or dissolved in an aqueous medium;
- Bio-gas;
- Polyvinyl alcohol polymer foils;
- Saw dust, residues and waste, also agglomerates in the form of blocks, briquettes, pellets and similar shapes;
- Paper, carton, cardboard and products manufactured from them in the Czech Republic, on the condition that the certificate indicating production from more than 70 % recycled paper is issued by a Branch Certificate Center;
- Water and wind turbines with outputs respectively up to 100 kW and 75 kVA
- Heat pumps;
- Solar facilities;
- Household appliances for water purification and small waste treatment plants for family houses, and any parts and components for them, fillings for the appliances and plants;
- Machinery and instruments for air filtering and purifying;
- Automobile catalytic converters;
- Passenger cars and other primarily passenger motor vehicles with electric motors;
- Economical light sources (fluorescent and discharge tubes and their components);
- Thermostat valves;
- Flow meters;
- Heat consumption meters and hydrometers for households.

Due to approximation to EC legislation, it is proposed to remove most of the environmentally friendly products from the list, the reason is that with regards to current EC directive 77/388/EC which allows only certain services connected to waste management to be included in the reduced tax rate.

Income tax allowances

The relevant legislation is Act No. 586/1992 Coll., on income taxes, in wording of later amendments.

Income from the operations of small hydro-electric power plants with an output up to 1 MW; wind powered electricity generating stations; heating pumps; solar

powered facilities; biogas-producing plants; facilities producing bio-degradable substances, which are determined in generally binding legislative provisions; and facilities utilizing geothermal energy; are exempted from paying income tax in the first calendar year of their operation and in the following five years.

The environmental aspect is also reflected in the possibility to decrease the tax base by 15 % from entering price of equipment for water treatment (used in buildings) and sorting and other equipment for using renewable sources, if the payer is the first owner of such equipment.

Road tax

The tax was introduced by Act No. 16/1993 Coll., on road tax, in the wording of later amendments. In principle the law levies a tax on the use of roads by motor vehicles engaged in business activities. The basic rate varies between USD 31 (engines up to 800 ccm) and USD 1 292 (vehicles over 36 tons) annually. The environmental aspects of this tax include exemption of vehicles used regularly for public transportation in urban transportation systems, vehicles used exclusively for the transportation of objects from storage sites to loading sites onto railway, shipping or air transportation, or from such a site to their destination (on the condition that the distance is not more than 50 km).

Highway toll

The toll was introduced in 1996, each car entering the highway has to be marked with a highway toll sticker. The toll varies for different car types (USD 21 for passenger cars, USD 51 for heavy transport etc.) and is paid annually. The revenue should partially cover some expenses on highway repairs, reconstruction and buildings, but its total amount is of marginal importance.

Airplane noise pollution tax

The charge has a non-profit character, the revenue is used for monitoring (approximately USD 0,64 mil. each year). The rates are related to potential damages to the environment, there are 4 categories of noise introduced, the tax rate varies from 0 to 1 USD/ton of airplane mass.

Excise taxes

Excise taxes are introduced by Act No. 587/1992 Coll., in the wording of later amendments. From the environmental point of view the excise tax on gasoline and diesel has relevance, although the revenue goes to the state budget and thus is not earmarked. Until spring 2000, there was a zero tax rate on bio-diesel, but since July 2000 the diesel part of the bio-diesel is taxed as regular diesel. This exemption will be replaced by the direct support of the producers of oil seed rape (to avoid profits for those who only mix the bio-diesel, but do not produce the rape seed oil).

Environmental tax reform

It has been found that a dominant factor in environmental damage, that is reflected in several top-priority aspects of environmental policy, consists in the high level of consumption of natural resources or the low level of efficiency of their use. This is, understandably, a global issue; however, this is especially relevant for the economic environment in the Czech Republic, which has been distorted by a number of market deformations in the area of fuel and energy. In spite of the undoubted advances that have been made in improving the quality of the environment, the fuel and energy production sector remain one of the predominant polluters of the environment.

The issue of the environmental impact of the fuel and energy production sector can be summarized in the following points:

A) the low level of effectiveness of the utilization of sources of energy (and natural resources in general) and the related high consumption and lack of stimuli for effective implementation of measures for energy savings and use of renewable sources of energy,
B) the subject of emissions of greenhouse gases in connection with compliance with the commitments of the Framework Convention on Climate Change (Kyoto Protocol),
C) the subject of pollution of the ground-level layer of the atmosphere (transportation and small pollution sources),
D) the subject of emissions of sulfur dioxide and other pollutants.

Introduction of taxes on fuel and energy

A description of the above top-priority areas indicates that the individual areas are very closely connected. It thus seems that it is possible to find an approach that would combine a certain simplicity and transparency and that would simultaneously have, as far as possible, a broad and long-term stable effect. We are of the opinion that this area is suitable for resolving through taxes because, in addition to fulfilling the basic preconditions stated above, the following arguments can also be put forward:

- this is an important, top-priority area of the subject of environmental protection and it is thus suitable to utilize instruments with complex action rather than emphasizing a specific narrow aspect and whose effect would be reflected in the creation of an economic environment that would motivate the entities themselves to a desirable change in behavior,
- this is an aspect that can be suitably resolved through adjusting prices (in the sense of internalizing externalities) because this will create stimuli for rational

exploitation without the necessity for expensive administration and control – see above; this instrument would permit a gradual cut-back in the current system of charges in the area of air protection,

- the fuel and energy aspect is part of the entire economy and thus the approach will have complex consequences,
- the approach adopted will be of interest to international institutions (OECD, EU),
- specific practical experience has been gained in this approach and it has been favorably accepted or implemented in a number of countries (Germany, Northern Countries, United Kingdom).

The **introduction of consumer taxes on solid fuels and on electrical energy and an increase in the rates of consumer taxes on carbonaceous fuels** would seem to be the best approach to this issue; these taxes would be simultaneously compensated by a decrease in other taxes or general payments. As this is a rather extensive issue, it must be described in greater detail.

The economy in the Czech Republic (and that in a number of other countries) is faced with the problem of a rather high tax burden on both business entities and on individual inhabitants. There is thus substantial political pressure, and CR is no exception here, for avoiding a further increase in the tax burden. In other words, equalization of prices through the introduction of further taxes on environmentally detrimental commodities would mean an increase in this tax burden, with the associated detrimental consequences on the economy as a whole and on the population in particular; for this reason, it would be very difficult to justify this approach politically. Thus, the variant of a budgetary neutral approach could be adopted, which would simply shift taxes to place a greater burden on commodities with detrimental impacts on the environment and a lesser burden on commodities that are beneficial from the standpoint of the economy and society.

The introduction of these taxes should create pressure for rational utilization of natural resources; nonetheless, because of the significant impact on the economy and social conditions of inhabitants, it is necessary to proceed slowly. It is proposed that, in the first step, taxes be introduced on fuel and energy and that taxes on other natural resources be introduced in the subsequent steps (water, forests, soil, mineral resources).

In addition to environmental criteria, the introduction of these taxes should also be stimulated by economic criteria, i.e. the protection of the environment should become a motive for attempts to increase effectiveness rather than a limiting factor.

These taxes should fulfill the following criteria:

- they should be constructed sufficiently to permit a flexible reaction to a change in economic conditions,
- they must be prepared and introduced with a long-term view so that they create a stable and predictable economic climate,
- they must provide sufficient time for adjustment,
- they must be transparent and politically acceptable,
- they must have a favorable effect on the economy as a whole.

These requirements are best met by **gradually increasing taxes on fuel and energy,** that would combine both environmental (they would affect the consumption of these fuels and thus environmental pollution) and economic aspects, because they would stimulate more rational use together with pressure on savings in general. One of the targets of this measure would thus be an infringement of the general principle of tax neutrality (similar to consumer taxes) by the principle of preference for environmental protection.

The main principle behind these taxes would be the motivating effect, it is desirable, and necessary, from an economic point of view, that these newly introduced taxes be **fully compensated so as to avoid an increase in the overall tax burden**. In general, there are a number of ways of ensuring this; however, the most suitable seems to be a decrease in the tax burden on the labor force, which has a number of forms in the economy (social and health security paid by both employees and especially employers, income taxes, etc.). An adequate decrease in these taxes or payments thus has a very marked social effect as a "cheaper" labor force because of the lower tax burden and is therefore an implementation of an active employment policy. Thus, the current concept of introduction of taxes on fuel and energy (compensated in relation to labor) has basically two aspects; on the one hand, it creates pressure on rational exploitation of natural resources and thus a favorable benefit for the environment (environmental aspect) and it would also increase employment (social aspect).

As the introduction of taxes on fuel and energy must be accompanied by a change in the legislation in the sense of provision for neutrality, this approach is usually termed environmental tax reform, however, only in this narrow sense.

On the other hand, it is clear that this approach would lead to a considerable burden for the economy, primarily for companies with high energy intensity or operations

with a technically high consumption of fuel and energy. Thus, a mechanism must be created to provide sufficient potential for adjustment without loss of the motivating aspects of the taxes.

The basic principles of the approach utilizing revenue-neutral taxation of fuels and energy can be summarized as follows:

- in the first step, environmental tax reform would lead to zero or only minimal taxation of some fuels; this would be commenced in 2004 (taking into account the current state of this area in the EU),
- in subsequent gradual steps after evaluation of the impacts of the first or previous steps in the reform, taxes would be introduced or the existing rates increased for fuels (in yearly or two-year cycles) for derivatives of petroleum used to produce energy and for electrical energy through taxation of the primary resources (coal, natural gas); in contrast, electrical energy will be taxed through taxation at the output,
- in the longer term (after 10 – 15 years), consideration can be given to taxation of other natural resources (soil, water, forests, mineral resources) where the principle of the taxation would remain unchanged; these taxes would be introduced after evaluating the impacts of the taxation of commodities in the first wave,
- taxes would not be imposed on renewable sources of energy (wind, geothermal, and solar energy and energy from small hydro-electric plants), waste heat and combustion of waste, including combustion of landfill gases, biomass
- the taxes would be imposed through consumer taxes,
- the taxes would be announced sufficiently far ahead of time,
- it is expected that the tax rates would gradually increase in several steps through amendments to the Law on consumer taxes,
- a tax relief system will be created for enterprises that utilize taxable commodities for technical purposes (chemical reduction, electrolytic processes, etc.),
- a system of time-limited exemption will be created for high energy-intensity branches to create sufficient space for adjustment to the new conditions,
- the new taxes will be fully compensated so as to achieve budgetary (revenue) neutrality (according to the similar principle in the EU – when this is approved).

The technical approach to taxes basically utilizes the current system of consumer taxes. This approach will bring a number of advantages as this tax system is already functioning in the Czech Republic without problems. In relation to hydrocarbon fuels and lubricants, this will correspond to a simple increase in tax rates (they are already subject to taxes) which would be compensated if the increase were to be a result of environmental tax reform. So far, the priority consists in attaining the existing minimum rates in the EU for mineral oils. The existing Law No. 587/1992 Coll., on consumer taxes, will be divided into several individual laws as of January 1, 2002, on the basis of the individual chapters of the Law grouping a certain group of commodities with common characteristics (5 new laws will be created – laws on consumer taxes: on hydrocarbon fuels and lubricants, on cigarettes and tobacco products, on beer, on wine, and on alcohol).

The newly created tax on fuel and energy could become the content of the tax title of tax for protection of the environment, defined in Law No. 212/1992 Coll., on the tax system. Its consumer character would remain preserved in this case. Laws on consumer taxes on solid fuels and electrical energy would be newly introduced.

Any other steps in the future (taxes on waters, soil, other mineral resources) should be implemented in the framework of the tax title of tax for protection of the environment, but nonetheless as taxation of a consumer nature.

The necessity of ensuring budgetary neutrality remains a separate aspect. The subject of compensation must be viewed both from the point of view of industry and from the point of view of the individual households. In relation to industry, compensation in the area of tax burdens on work would mean a decrease in the cost of the labor force (e.g. through a decrease in payments for social insurance) and thus those branches with an above-average portion of human labor would be preferred. Nonetheless, there are a number of branches of industry or enterprises that could encounter difficulties as a consequence of implementation of this measure, because the sum of taxes paid would greatly exceed the sum of compensation. For this reason, space is created in the framework of the proposed instrument for these purposes (exemption from the taxation of commodities intended for non-energy-production purposes, a longer time for adjustment for energy – intense branches). In relation to households, it is possible to utilize the mechanism of decreasing income taxes or payments for social insurance: for households that do not have their own incomes, or where these payments are made by the state (i.e. mainly pensioners and low-income households) other systems can be used (contribution per capita, increased allowances, etc.). Nonetheless, both aspects will have to be analyzed carefully and adjusted to specific conditions in the Czech Republic. For example, in the case of compensation through social insurance, we consider it best to direct taxes on fuel and energy to a separate social security fund and to carry out compensation in the framework of this fund.

3. Programs for financial support of environmental protection in the Czech Republic

State Environmental Fund

The State Environmental Fund is the main source of financial support in the area of environment in the Czech Republic. The fund was established by the Act. No. 388/1991 Coll., on the State Environmental Fund of the Czech Republic, and its activities are regulated by related regulations – the Statute of the State Environmental Fund and Directive of the Ministry of the Environment of the Czech Republic on the provision of financial funds from the State Environmental Fund of the CR. A top-priority area of the work of the Fund consists of the annual update of Annexes to the Directive. These basic rules for the utilization of the finances of the Fund are currently based on material entitled "Strategy of the State Environmental Fund in the Years 1997 – 2000". This material evaluated the previous activities of the Fund and, at the same time, defined the future orientation of the Fund. The priority areas of the support also reflect the efforts of the Czech republic to EU entry and are in compliance with the State Environmental Policy.

The standard income of the Fund consists of:

- charges for the discharge of waste water into surface water (22,2 %),
- fees for emission of harmful substances into the air (28,2 %),
- fees pursuant to the Waste Law (8,7 %),
- payments for permanent and temporary withdrawal of agricultural land from agricultural production (9,2 %),
- fees for the production and import of substances damaging the ozone layer of the Earth, fines imposed by the administrative bodies of the SEF and the Czech Environmental Inspection Agency and payments on loans (8,7 %),
- transfer from the National Property Fund – Program for Revitalization of the Air (23 %).

Standard types of expenditures from the Fund consist of:

- subsidies (only to non-business entities or municipalities),
- support through loans with an interest rate of 3 % (only to non-business entities or municipalities),
- support through loans with an interest rate of 7 % (only to business entities and the other subjects),
- securities for loans, up to an amount of USD 1.3 mil. with a guarantee period of 10 years – for this service, the Fund receives remuneration in an amount of 2 % of the secured amount,
- contribution for partial payment of interest on loans up to an amount of 7 % for a maximum period of 5 years,
- interest-free loans (only to non-business entities up until 1996),
- combination of subsidies and interest-free loans (only to non-business entities, up until 1996),
- loans at decreased interest rates (business entities, to 1995).

The following programs are currently supported from the State Environmental Fund:

Water sector:

- **medium scale sources of water pollution** (2 000 – 10 000 equivalent inhabitants) for construction of a waste water treatment facility or increasing the capacity of the current one,
- **protection of drinking water sources** – measures at communal sources of pollution up to 2000 equivalent inhabitants located within the drinking water sources protection areas,
- **industrial sources** – measures to reduce pollution by organic substances, heavy metals, nitric substances and phosphorous in waste water,
- **increase of capacity or intensifying current communal waste water treatment plants** – increase in capacity up to 10 000 – 50 000 equivalent inhabitants,
- **enlargement of sewage systems** – measures at those sources of water pollution where there is a sewage system and waste water treatment already in operation and an additional source of pollution ranging between 300 – 10 000 equivalent inhabitants is connected (the total capacity must stay within the capacity of the waste water treatment plant).

Air sector:

- **small and medium sources of air pollution operated for public activities** – sources of heat and hot water for schools, hospitals etc.
- **medium and large sources of air pollution** – intended for sources form fuel-energy complex, with installed output smaller 10 MW after reconstruction, the condition of this program is an energy efficient solution (20 % fuel consumption reduction),
- **wider use of co-generation** – the target is to support wider use of combined heat and power generation, where the CHP plant has to reach at least 80 % efficiency,
- **developing the infrastructure of small size municipalities** – intended for municipalities with less than 1000 inhabitants, mainly in the area of natural gas and central heat supply, one of the conditions are energy savings,

- **reduction of organic substances emissions** – mainly focused on technological processes,
- **protecting the Earth's ozone layer,**
- **program for reduction of emission and ambient burden on landscape and nature.**

Protection of nature, landscape, soil and use of natural resources:

- **care of natural environment** – the target of this program is to protect nature and landscape particularly in protected areas and in landscapes beyond the framework established by the Act. No. 114/92 Coll., on landscape protection, the measures will be primarily supported in National parks, in the first two zones of Protected landscape areas, in small scale landscape protection areas etc.

Waste management:

- **support of recultivation and remediation of old waste dumps** – program intended for municipalities and other non-profit organizations,
- **program for supporting the use and disposal of waste,**
- **program for preparing waste management concepts.**

Technology, products and alternative energy sources:

- **cleaner production** – support and stimulation of measures for environmental protection including primarily preventive action reducing environmental damage with an increase in economic efficiency at the same time,
- **EMAS** – support of EMAS introduction, mainly in small and medium firms and in healthcare and services, support is realized as supplementary financing of EMAS projects.

The fact that the greatest percentage of expenditures from the Fund so far have been directed towards the protection of the air and water is in accordance with the priorities laid down by the State Environmental Policy. The character of the support projects (construction of small waste-water treatment plants and connected sewer systems, general conversion to gas in towns and municipalities and conversion of furnaces to gas) corresponds to the primary needs of the community sector and also to the financial capabilities of the Fund. There is a significant disproportion in the work of the Fund between income from fees for pollution of individual components of the environment and expenditures for their protection. This development reflects the specific features of conditions in the Czech Republic resulting from the interplay of factors related to the inherited unsatisfactory state of the air and the factor of privatization. While income generated in the sphere of air contributed 31,3 % to the total income (fees and Program of Revitalization of the Air), expenditures for air protection correspond to only 29,5 % of total expenditures. In contrast, income from the sphere of water corresponded to 23,2 % of total income, while expenditures for water protection equaled 50,9 % of total expenditures. This development reflects the specific features of conditions in the Czech Republic resulting from the interplay of factors related to the inherited unsatisfactory state of the air and the factor of privatization.

In order to elucidate the mechanism for evaluation of applications to the fund, the method for the evaluation of applications for support from the fund in the sphere of air protection is described as follows. Completed applications are evaluated on the basis of the following criteria:

1. **the level of the chief pollutants' concentrations at a given locality** – this criterion is established on the basis of the imission and emission conditions at a given location and is expressed in terms of imission and emission orders by municipalities as drawn up by the state administration,

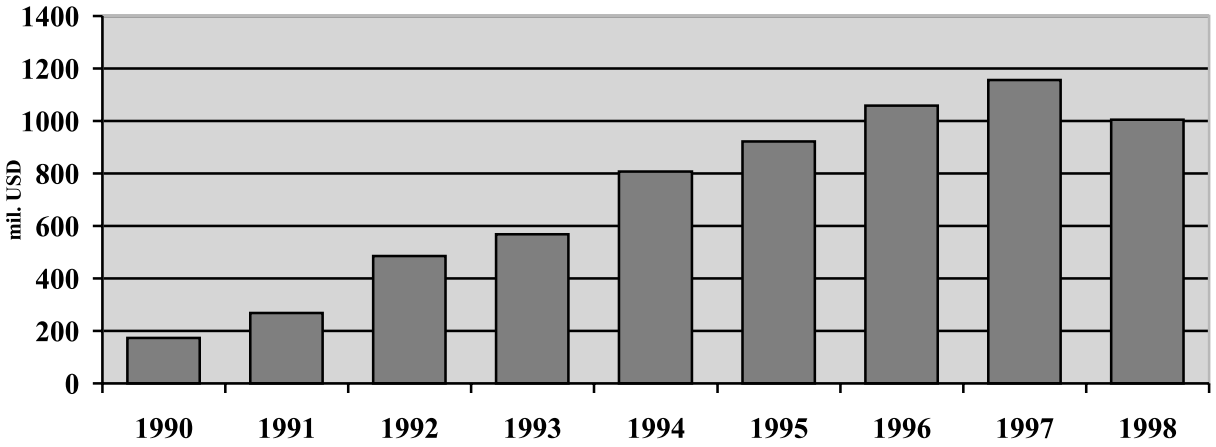
2. **relation to utilization of current capacities and regional environmental policy** – this criterion is employed to establish the priority assigned to individual projects by the pertinent regional department of the Ministry of the Environment; this priority corresponds to the order of projects on the level of urgency in finding a solution,

3. **preference for measures that comply with strict emission limits** (e.g. a higher technical level of the measure) – this factor is determined as a percentage of the value of the emission limits for the main and, possibly, other pollutants, the values of the criteria of the technical level for the individual measures are given by the order of the technical levels for all the unresolved applications on the date of evaluation,

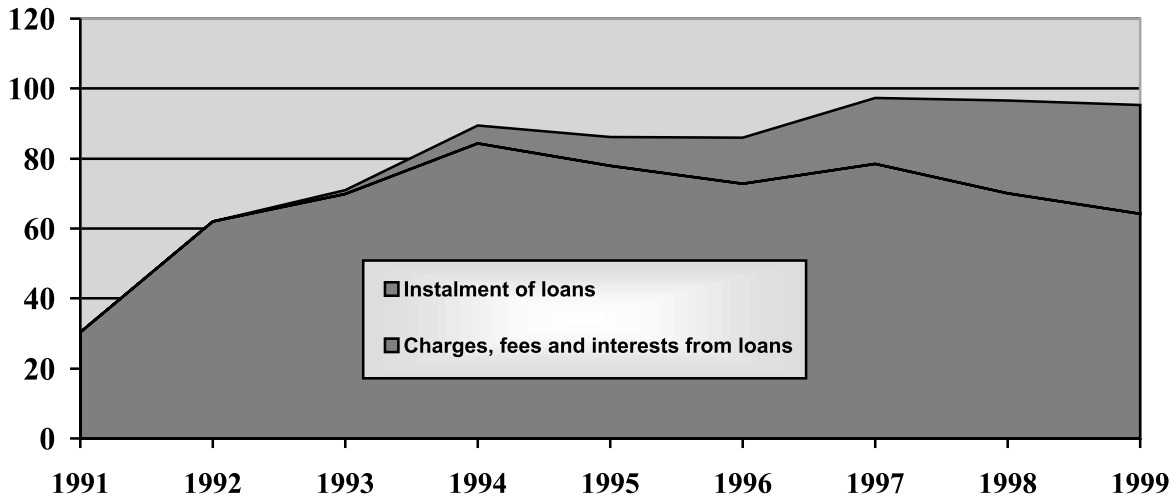
4. **the specific financial requirements calculated from the costs for the implementation of measures and the requested support from the Fund, related to a unit of pollution abatement** – these requirements are defined as the ratio of the investment costs (or total support, or total subsidies) for the implementation of the measure and the unit emission calculated from the value for abatement of the chief and/or other pollutants per year,

5. **consideration of the requirements of environmentally burdened areas** – this criterion is expressed in terms of a point value of the total sum of all the evaluation factors carried out within the framework of the projects, "Review of the Delimiting of Environmentally Burdened Areas in the Czech Republic".

Graph 7 – Revenues of the State Environmental Fund from various charges (mil. USD)



Graph 8 – State Environmental Fund revenues by the type (mil. USD)



State program for support of energy savings and use of renewable sources of energy – part A (energy savings)

For description see part about Ministry of Environment. The part focused on energy savings (Part A, Part B – renewable sources). This part of the program mainly focuses on the following areas:

- financing of selected projects for energy savings (living houses, public services etc.),
- optimizing energy supply in housing estates,
- energy savings in industry, use of alternative renewable sources in transport and agriculture,
- energy performance contracting,
- consultancy and education,
- preparation of energy documents for selected areas.

State program for support of energy savings and use of renewable sources of energy – part B (renewable sources of energy)

This program is prepared in co-operation between the Ministry of the Environment and the Ministry of Industry and Trade. Support of renewable sources of energy is under the competence of the Ministry of Environment (support provided through the State Environmental Fund), energy savings are managed by the Czech Energy Agency (competence of the Ministry of Industry and Trade).

Area of renewable sources of energy

(Note: The support from the Fund is provided within the framework given by relevant regulations – see chapter about SEF).

The following major groups of projects are available in this program:

Investment projects

- **support of investments for replacing heating and hot water preparation using solid fossil fuels by biomass, eventually in combination with solar systems** – support intended for local systems in flats, family houses or houses used for living including buildings of public services, social care and recreation (includes support of biomass use in new flats, family houses etc – as above),
- **support of investment for replacing heating using solid fossil fuels or direct electricity heating by a central systems of heating and hot water supply using renewable sources of energy** – support intended for smaller municipalities,
- **support of investment into the wider use of renewable sources of energy in education, healthcare and other such sectors** – replacing the use of solid fossil fuels for heating and hot water preparation,
- **support of investment into replacement of heating using direct electricity heating or solid fossil fuels by heat pumps** – intended for family houses, houses for living, sector of public services etc,
- **support of investment into partial replacement of solid fossil fuels heating by solar systems** – intended for family houses and public services, also for new buildings,
- **support of investment into small water power plants construction** – up to 5 MW,
- **support of investment into wind power plants construction,**
- **support of investment into common generation of electricity and heat from biomass,**
- **support of investment into solar and wind systems other than living or public services** – sport places, baths, pools, dryers etc, there might be also only seasonal operation of such facilities (such as pools).

Non-investment projects

- **support of education and consultancy ensured by state administration and its organizations**,
- **support of education and consultancy ensured by non governmental organizations**.

Program of water systems revitalization

This program is prepared as a program of renovation, stabilization and care about the water regime of the landscape. Its target is to create conditions for renovation of nature and resources and optimalisation of the water regime of a landscape which is a basic condition for its sustainable use. This program is financed from the State budget.

Program of landscape protection

In this program there are non-investment projects made by owners or users of lands beyond their obligations given by the legislation. This program creates conditions for rehabilitation of basic functions of the landscape which allows its optimal use (agriculture, water management, forestry, recreation etc.). This program is financed from the State budget.

Program of small water management actions

This program is managed by the Ministry of Environment in co-operation with the Ministry for Regional Development and the Ministry of Finance. The subject of the support is construction, eventually reconstruction, of waste water treatment plants and sewerage systems. This program is also financed form the State budget.

Anti-radon program

The objective of this support is to protect the public from radon radiation. State support is provided for anti-radon measures in living houses, buildings used for educational purposes and for removal of radon from water used for public water supply. The program is also financed by the State budget.

ZOO contributions

Because Czech zoological gardens co-operate with other nature protection bodies, there is a state support (State budget) for such activities provided, mainly for:

- breeding of endangered species,
- co-operation of zoological gardens on nature protection in the Czech Republic,
- other necessary expenditures within international co-operation on programs for breeding of endangered species etc.,
- contributions for operational costs of Dvůr Králové ZOO connected with African fauna breeding.

Treatment of environmental damages caused by the Soviet army

Within this program there is a treatment of environmental damages at localities which were abandoned by the Soviet army and which were caused by its activity. It mainly concerns exploration, remediation, monitoring and supervision of remediation works etc. The program is financed from the budget of the Ministry of the Environment.

Environmental research

Subject of the support are research and development projects, focused on environmental protection. The Program is financed by the State budget.

Support from ISPA fund

The goal of ISPA (the Instrument for Structural Policies for Pre-Accession) is to contribute to the preparation of associated countries to full membership in the EU. The support provided will be focused on priority areas given by

the State Environmental Policy and the National Program of Preparation of the Czech Republic for EU Entry. The support will be provided through the State Environmental Fund.

Removal of flood damage

The target of this program is the renovation of water streams after floods in 1997 and 1998. This program is intended for the Water companies of the Morava, Odra and Labe river basins, also for the company Lesy ČR (Forests of Czech Republic) and State amelioration management. Municipalities are excepted from this program. This program is financed by the State budget.

Subsidies to Agrocomplex

The goal of this program is to support agriculture companies. From supported activities the following are indicated as having a positive influence on the environment: bee-keeping, stocking with animals (game), recovery of plants and afforestation.

Subsidies to forest management

The supported activities indicated as having a positive influence on the environment are the following – recovery of forests damaged by imissions, environmentally friendly technologies, ensuring the non-production functions of forests, care of water streams and protection of endangered species.

Support and Guarantee Farmer and Forestry Fund

This fund provides support for business activities, where the activity of the recipient of the support has to be at least 50 % connected with agriculture or forestry. The activities are often not oriented to environmental protection, but some of them (investment to avoid erosion, waste water treatment plants etc., support of use of renewable sources of energy, recycling etc.) have positive environmental effects.

Program of study of outflow ratio and preventive anti-flood measures and program for setting of potentially flooded areas

The recipient of financial support are companies Water Basins, company Lesy ČR (Forests of Czech Republic) and State amelioration management.

Complex land layout

The target of this program is to make management of land (new land users) easier, support environmental protection, improvement of the landscape etc. Only a very small part of the support can be indicated as having positive environmental effects.

Water management facilities

The target is to support the construction of waste water treatment plants, water supply facilities, sewerage. Also support the reconstruction of such facilities.

SAPARD Program (Support for pre-accession measures for agriculture and rural development)

The program is focused on sustainable agriculture and rural development in pre-accession stage. A lot of activities supported from this fund have a close connection to environmental protection (sustainable agricultural management, care about landscape, water and forest management etc.).

Combined transportation – investment support

The target is to support combined transport, especially the wider use of rail and water cargo transport, financial support is oriented to relevant transport subjects.

Combined transportation – non-investment support

Support is focused on shifting a part of road cargo transport between Lovosice – Dresden to rail, support is intended for the Czech Railways company.

System support of public transport

The goal of this program is to support the public transport fleet and transport infrastructure, except the subway in Prague, recipients of this program are all subjects (municipal and private) providing public transport services.

Public line transport

Program for supporting the resurrection of public line transport busses, for all of their providers.

Program of rural restoration

Program is focused on rural restoration, mainly on economic development of municipalities, renovation of buildings, public services, technical infrastructure and landscape protection. Program also includes a possibility of Phare CBC (Cross-border Cooperation) support in selected areas.

Program of support of construction of rental flats and technical infrastructure

This program should support the construction of new rental flats to ensure enough supply, increasing the standard of living and the solution of some specific problems. The support has some connection to environmental protection (sewerage, renewable sources etc.).

Uranium mining remediation

Financial support of remediation and liquidation of uranium mining. Attenuation is realized relatively very quickly, but is quite financially intensive.

Mining attenuation

Mining attenuation is realized in coal and ore mining. Environmental contribution is realized by (apart from the fact of stopping the mining) landscape restoration, treatment of water contaminated by mining activity etc.

Environmental investment in mining

Program to support the treatment of environmental damages caused by mining activities.

Technical measures in the areas of hygienic water protection

Support is realized in the form of financing remediation of damages caused by the liquidation of objects in such areas, caused by previous administrative decisions.

Cross Border Cooperation

This Phare program supports cross border cooperation bilaterally between the Czech Republic and Germany, Czech Republic and Austria and multilaterally among Czech Republic, Germany and Poland and among Czech Republic, Austria and Slovakia. The emphasis is given to projects respecting targets of a regional policy in those areas. One of the priority problems is also environmental protection, focusing on the area of waste water treatment and soil remediation (waste dumps). The financial support is provided as a grant and the investor has to contribute on realization of the project by 25 % of total costs.

Fund of small projects in the Czech Republic

The general goal of this Phare fund is the support of small projects (people-to-people type) and non investment projects within cross border cooperation (CBC) Phare. Funding should promote widening of the CBC scope, promotion of public participation and preparation of smaller projects which could prepare a space for bigger CBC projects.

FEMOPET network programs

Phare program for member countries of Organization for promotion of energy technologies (OPET, FEMOPET = Fellow Member OPET). It allows participation in selected demonstration projects and also to obtain some financial support from the budget of this project.

Financing of Energy Savings through Phare ESF

The aim of the Phare ESF (Energy Saving Fund) is to fill in the gap regarding the financing of small and medium scale projects for energy savings. This program is administrated by the Ministry of Industry and Trade.

Phare BEP program

Phare BEP (Business Environmental Program) provides loans for environmental projects for small and medium business firms to cover new requirements (given mostly by changes of legislation).

National Phare program – Environment

The National program was started in 1990 and will run after 2000. Since 1997 the projects are oriented to supporting EU accession only.

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