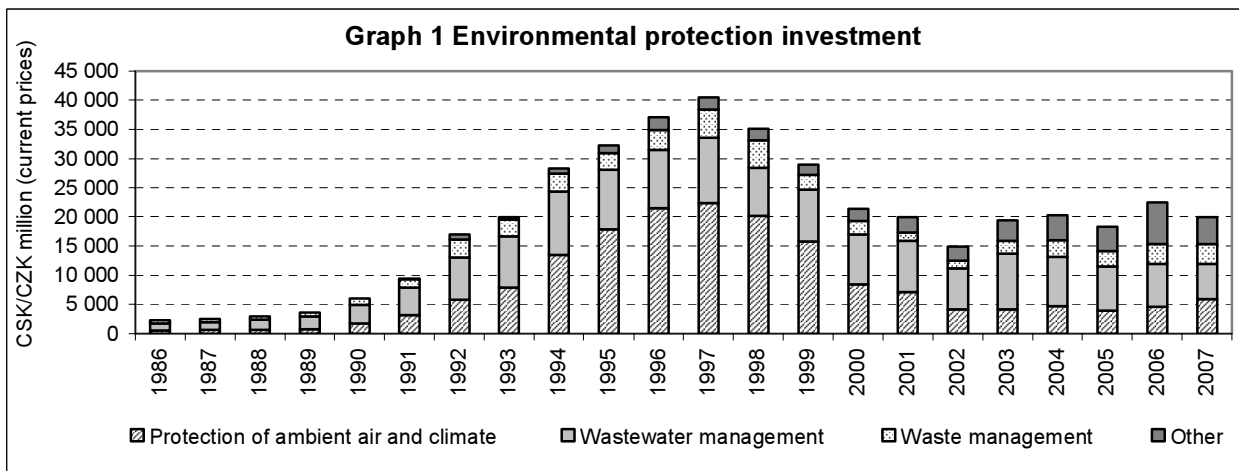


Environmental protection investment

According to the definition, environmental protection investment refers to total investment expenditure² related to environmental activities aimed primarily at collection, treatment, monitoring and control, reduction in volume, prevention or elimination of pollutants/pollution or of any harm to the environment caused by business activities.



For a long period of time environmental protection investment was measured in the framework of other statistical surveys. Between 1986 and 2001 questions on environmental protection investment were incorporated in the investment survey (form Iv 2-01 up to 1996, Iv 3-01 from 1997), in 2002 environmental

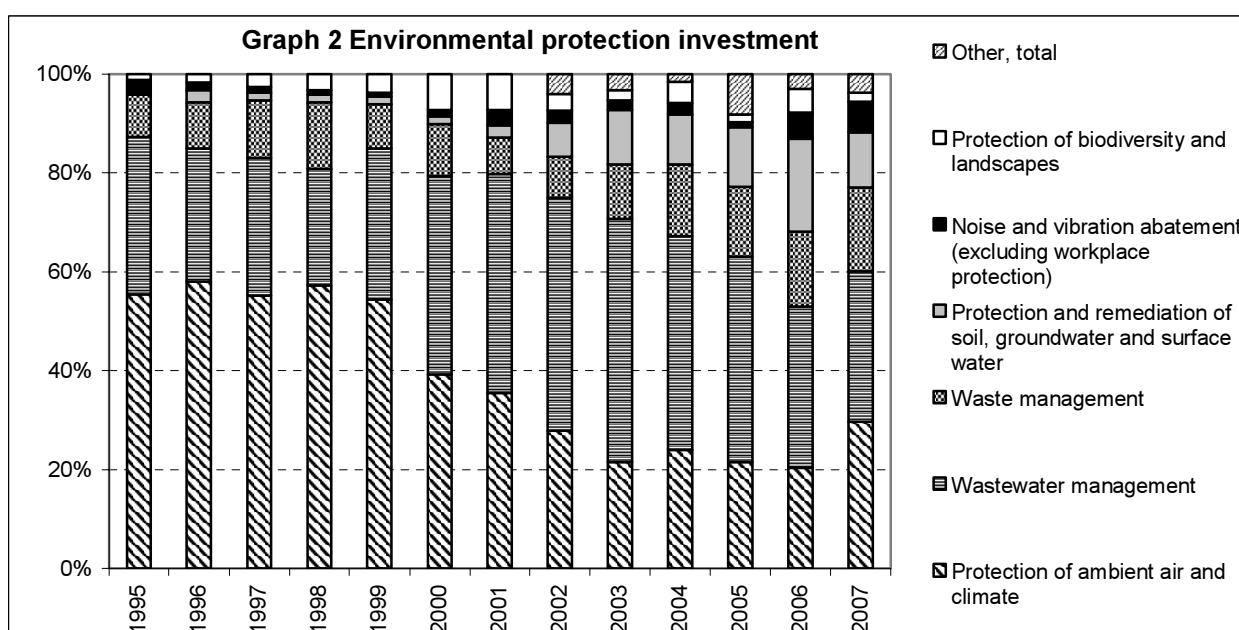
¹ The concept “non-investment expenditure” is used in the CZSO.

² Investment expenditure on environmental protection include total expenditure on acquisition of tangible fixed assets (TFA) spent by the reporting units on acquisition of TFA (by buying or self-activity), incl. the total value of TFA obtained by acquisition free of charge or by transfer carried out in compliance with relevant laws and regulations or by reclassification of personally used assets to business assets. Expenditure on acquisition of environmental tangible fixed assets includes separate movables and sets of movables with independent technical and economic objectives with usable life exceeding one year and in value determined by the accounting unit, obligatorily from the value laid down by the Income Tax Act (which is CZK 40 000 as from 2001).

investment was a part of the annual survey for businesses classified to selected production industries in the business sector³ (form P5-01) on the one hand, and on the other a part of the annual survey for government departments, territorial self-governing units, semi-budgetary organisations and similar government institutions⁴ (form VI 1-01, versions a, b). The public sector reported these data up to 2005. The business sector, starting from 2003, was covered by the above-mentioned survey – Annual survey on environmental protection expenditure – form ŽP 1-01. Since 2006 environmental protection investment data have been collected by a single statistical form ŽP 1-01 used for both business and public sectors.

In this part the environmental protection investment is viewed from several angles that are widely used for making comparisons and assessments. It is in particular division of investment into environmental domains according to the Classification of Environmental Protection Activities and Expenditure (CEPA 2000), by way of financing and by attributes assigned to each enterprise in the Business Register – by type of ownership of investing enterprise, by classification of the enterprise to institutional sectors, and by its CZ-NACE activity.

The Czech Statistical Office has measured environmental protection investment since 1986, and the amounts of money spent (current prices) are given in Graph 1. The graph also shows the distribution of investment by main environmental domains – protection of ambient air and climate, wastewater treatment, and waste treatment.



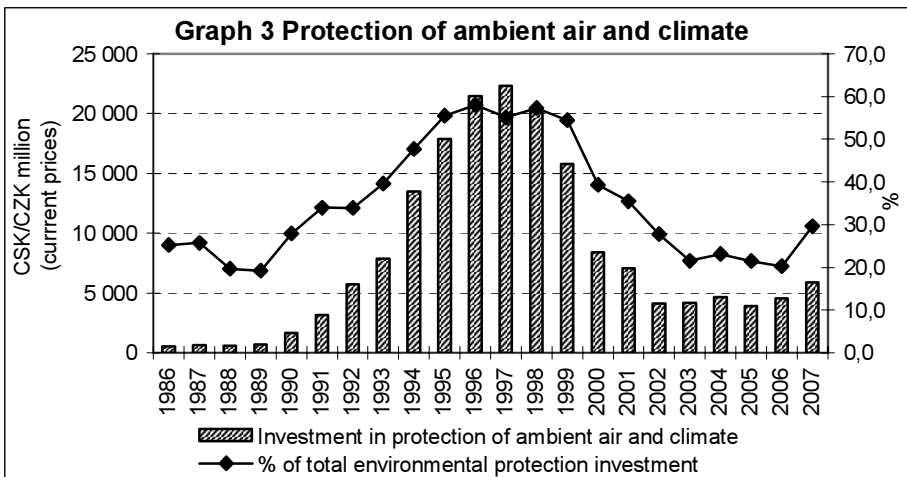
Besides these three main domains, environmental protection investment is divided into six other groups – protection and remediation of soil, groundwater and surface water; noise and vibration abatement (excluding workplace protection); protection of biodiversity and landscapes; protection against radiation (excluding external safety); research and development; and other environmental protection activities, all according to the above CEPA 2000 classification. The percentage distribution between individual environmental domains is clearly apparent from Graph 2. Since environmental protection investment has been measured, also CEPA domains underwent several development phases – their names changed as well as numbers of domains (only six environmental domains were observed before 2002).

We should point out that also the sampling conditions experienced changes (choice of CZ-NACE activities, limits for numbers of employees in businesses).

In the first years of the survey (in the 1980's) the volume of environmental protection investment was not very high, and water protection investment was dominating. From the beginning of the 1990's, in the framework of the main goals of the policy of the state and in the framework of new environmental legislation,

³ Non-financial corporations sector

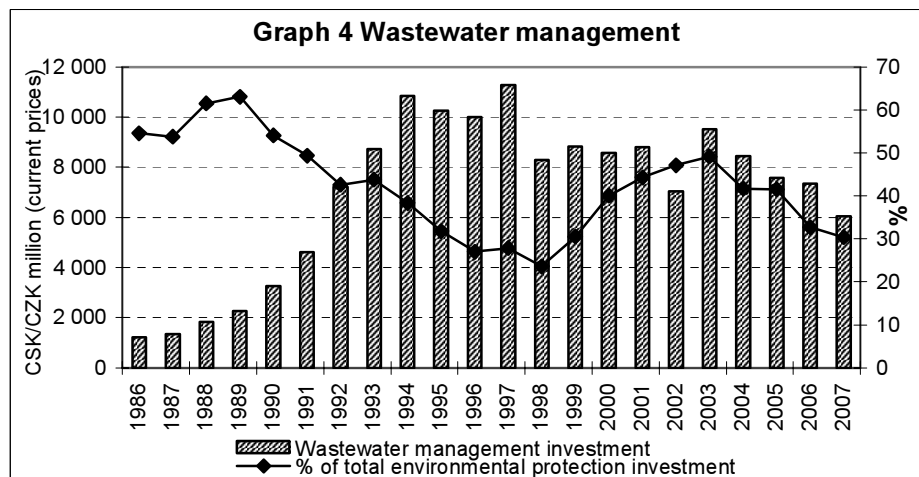
⁴ General government sector



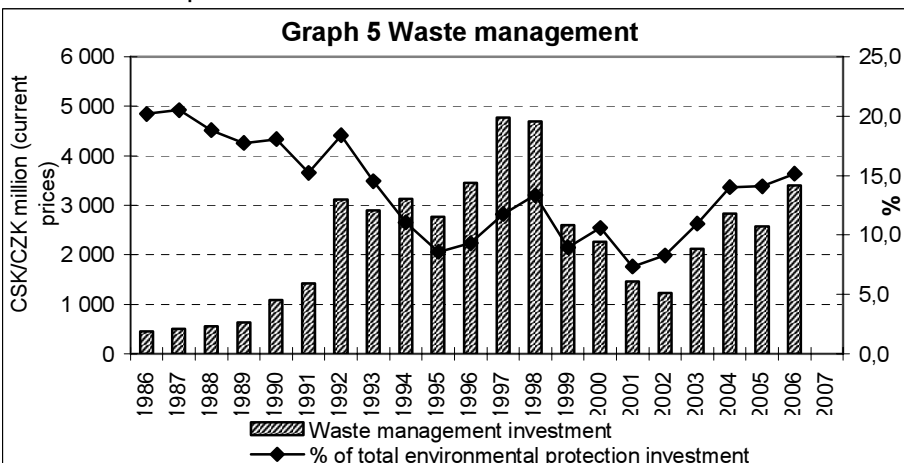
environmental protection investment was on the significant increase, especially investment in protection of ambient air and climate where the share exceeded 50% of the total volume of environmental investment in the years 1995–1998. This majority trend of investment in protection of ambient air and climate came to an end before the beginning of the 21st century, as 1998 was the

last year for implementing environmental amendments required by the law (Clean Air Act No. 309/1991 Sb. of 9 July 1991). Since 2000 the volumes of environmental protection investment oscillate around CZK 20 billion, the year 2002 being an exception⁵.

Graphs 3, 4, 5 show the volumes of money spent on the three main domains – protection of ambient air and climate, wastewater treatment and waste treatment. The predominating part of environmental investment was channelled into these three domains, ranging from the lowest share (68%) in 2006 to the highest share (nearly 96%) in 1995. The latter figure is due to the fact that only five



environmental domains were observed at that time. The graphs also present the shares in total environmental protection investment. Investment in the three domains was quite different with respect to

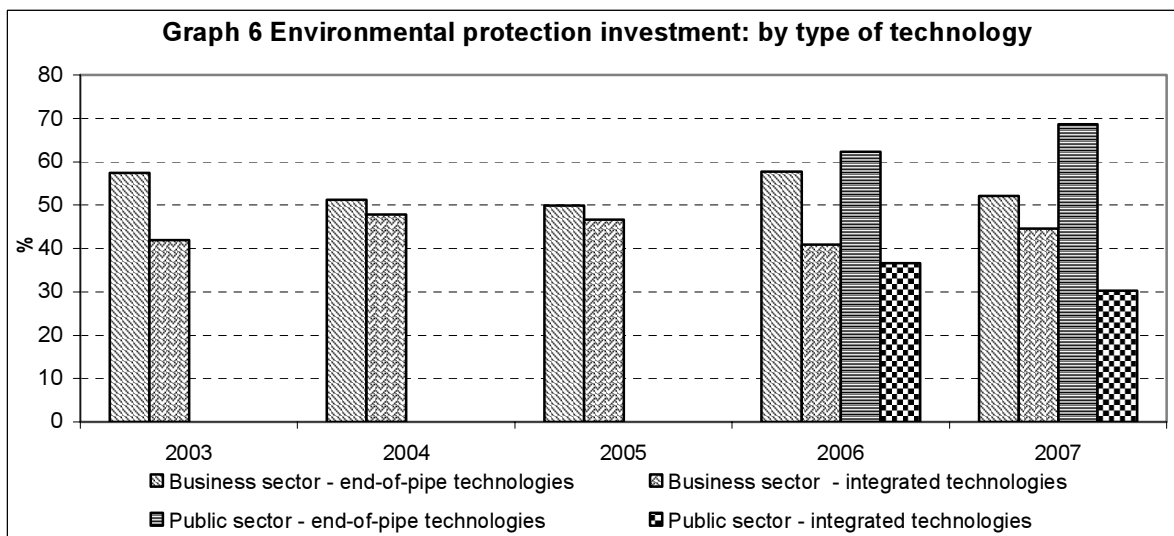


both trends and maximum amounts. The maximum investment in protection of ambient air and climate was reached in 1997 when the amount was twice as high as in wastewater treatment and four times as high as in waste treatment. Since 2002 protection of ambient air and climate has recorded no marked increases or decreases, wastewater treatment shows a downward trend and waste treatment an upward trend.

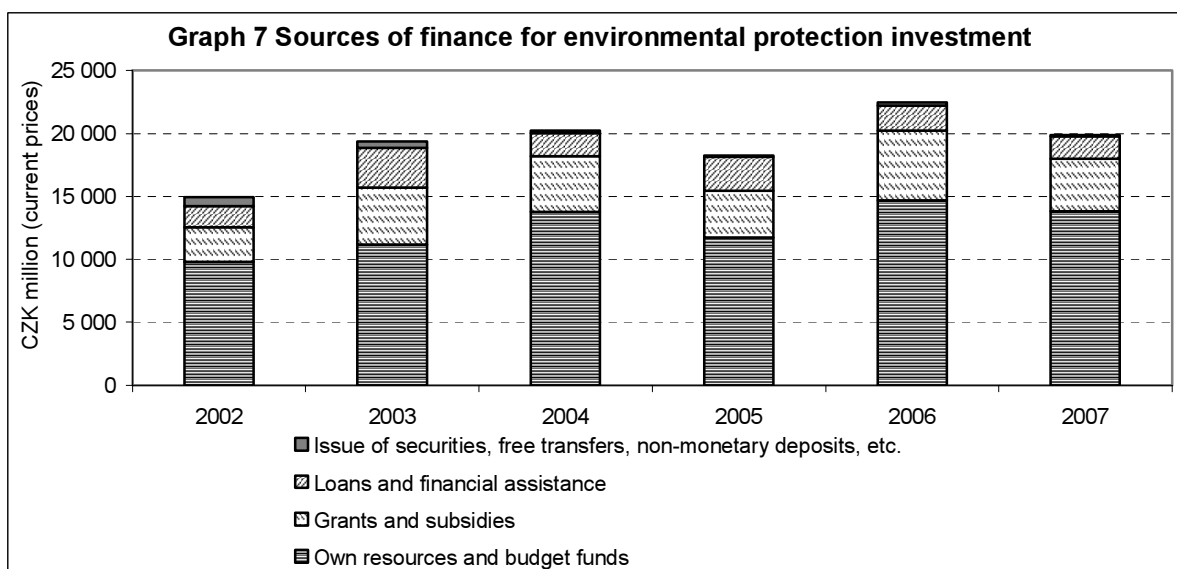
Between 1986 and 2007 environmental protection investment amounted to over CZK 400 billion (current prices); 41% were channelled into protection of ambient air and climate, 36% into wastewater treatment, 12% into waste treatment, and only 10% into all the other domains.

⁵ See above – environmental investment data are collected by two statistical forms – P5-01 and VI 1-01

Environmental protection investment is divided into end-of-pipe and integrated technologies. Unfortunately, statistics are available only since 2003 and data for the business sector only up to 2005, as the data have been collected in the Czech Republic by the new above-mentioned survey (form ŽP 1-01) and the public sector has been covered only since 2006. However, some of the respondents fail to divide their investment into those categories and a small part of environmental protection investment (up to 3.5%) remains unclassified. The following graph compares the volumes of end-of-pipe and integrated technologies in business and public sectors (see footnotes 3 and 4).

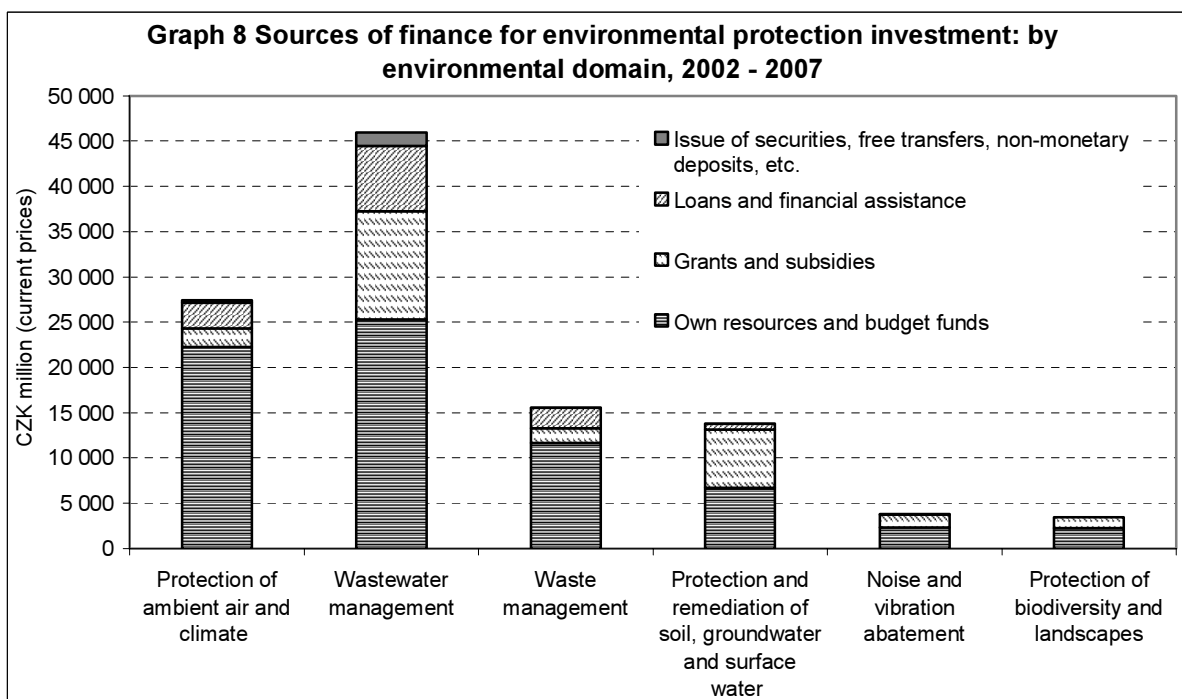


As to sources of finance for environmental protection investment, own resources and budget funds have always prevailed. There was a change in the classification of sources of finance in 1995–2007 and the comparable time series is available only from 2002, as presented in Graph 7.

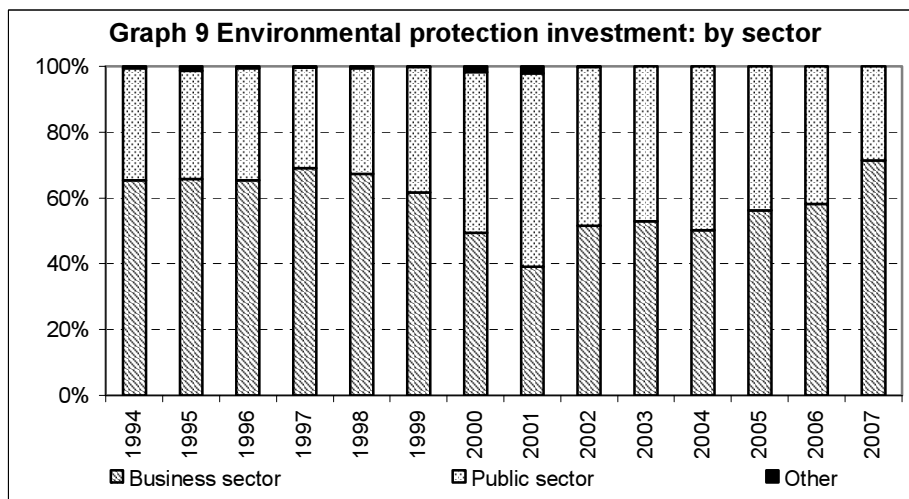


Graph 8 shows the percentages of sources of finance by selected environmental domains in total for 2002–2007 (current prices). Environmental protection investment is financed predominantly from own resources and budget funds; the respective shares differ from one domain to another. Some activities receive considerable proportions of money from grants and subsidies; for example, nearly 50% of finance for protection and remediation of soil, groundwater and surface water in total for 2002–2007 came from grants and subsidies. Together with loans and financial assistance, grants and subsidies play an important role also in financing wastewater treatment.

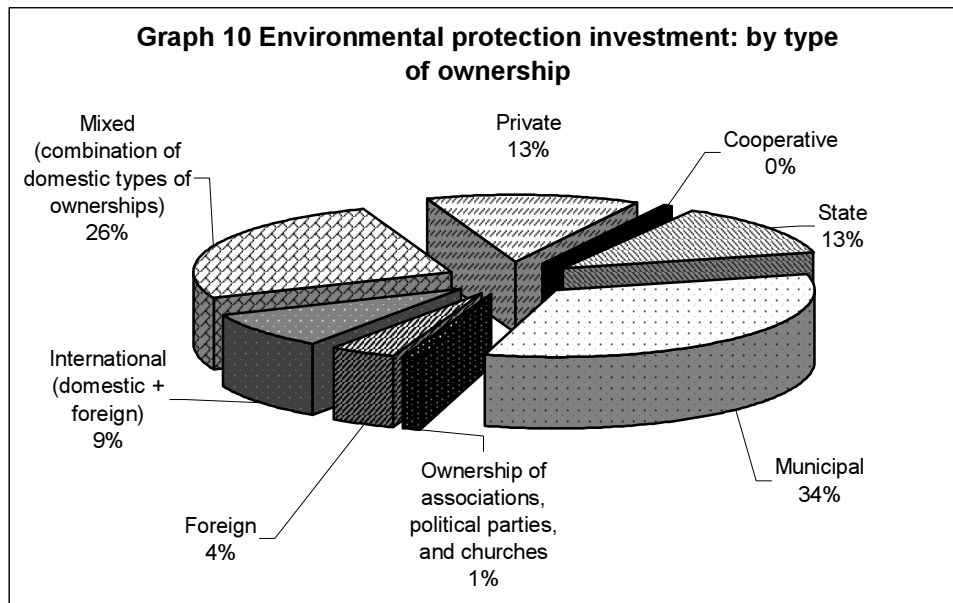
In total for 2002–2007, environmental protection investment amounted to CZK 115 billion (current prices), of which 65% were from own resources and budget funds, 22% from grants and subsidies (those from public budgets were dominating with 66%), 11% from loans and financial assistance, and only 2% from other sources.



Investment data divided into business and public sectors have been available since 1994. The public sector includes general government and semi-budgetary organisations out of public non-financial corporations. The business sector encompasses public non-financial corporations except semi-budgetary organisations, national private non-financial corporations, and foreign controlled private non-financial corporations. The shares of these two sectors in the volume of environmental protection investment are presented in Graph 9: business investment has always been higher than public investment, with the exception of 2001. In total for 1994–2007, the business sector invested CZK 217 billion (current prices), which made up 60% of total money spent on environmental protection investment; the public sector invested CZK 139 billion (40%). As all enterprises were obliged to report before 2003, the population also included other sectors which reported environmental protection investment, such as financial institutions and non-profit institutions serving households which are included in 'Other' in the graph.

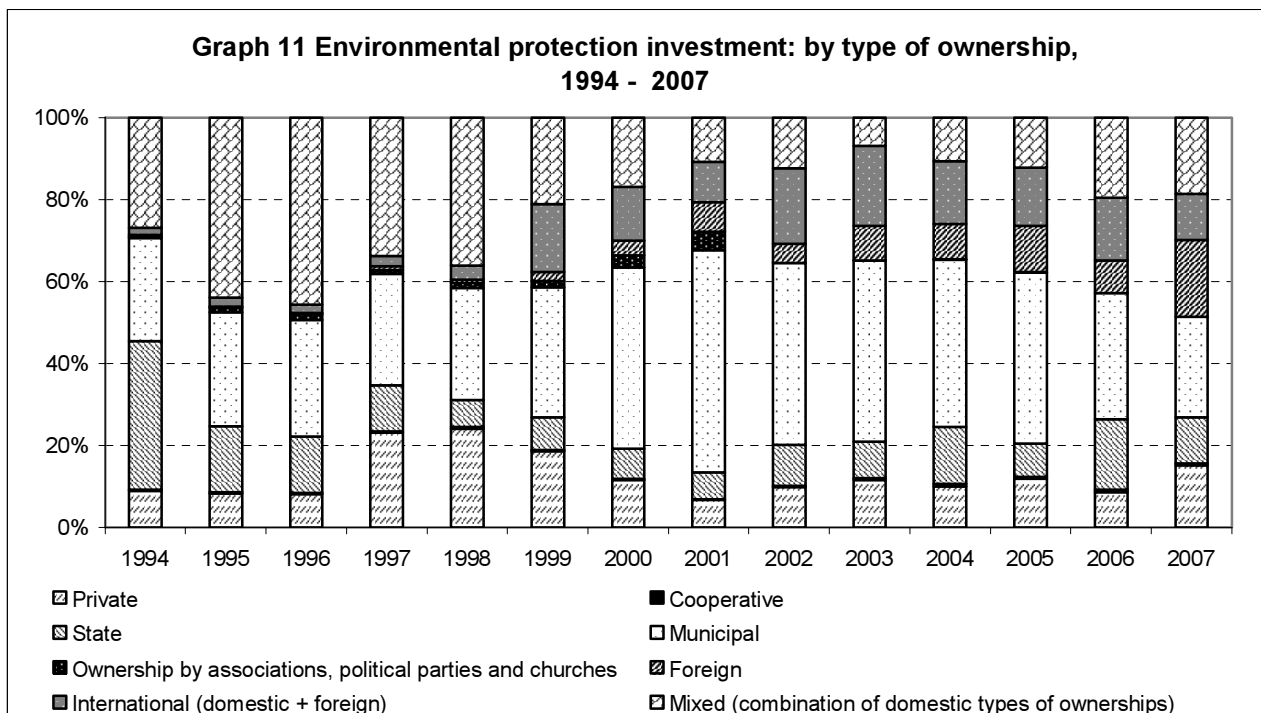


Each business kept in the Business Register is assigned a code of type of ownership. As a rule, all businesses can be divided into businesses established by domestic founders, i.e. in private, cooperative, state and municipal ownership, in ownership by associations, political parties or churches and in mixed ownership (combination of the above types), and businesses established under the participation of non-residents, so-called foreign ownership (100%), or international ownership (businesses with both domestic and foreign participation).



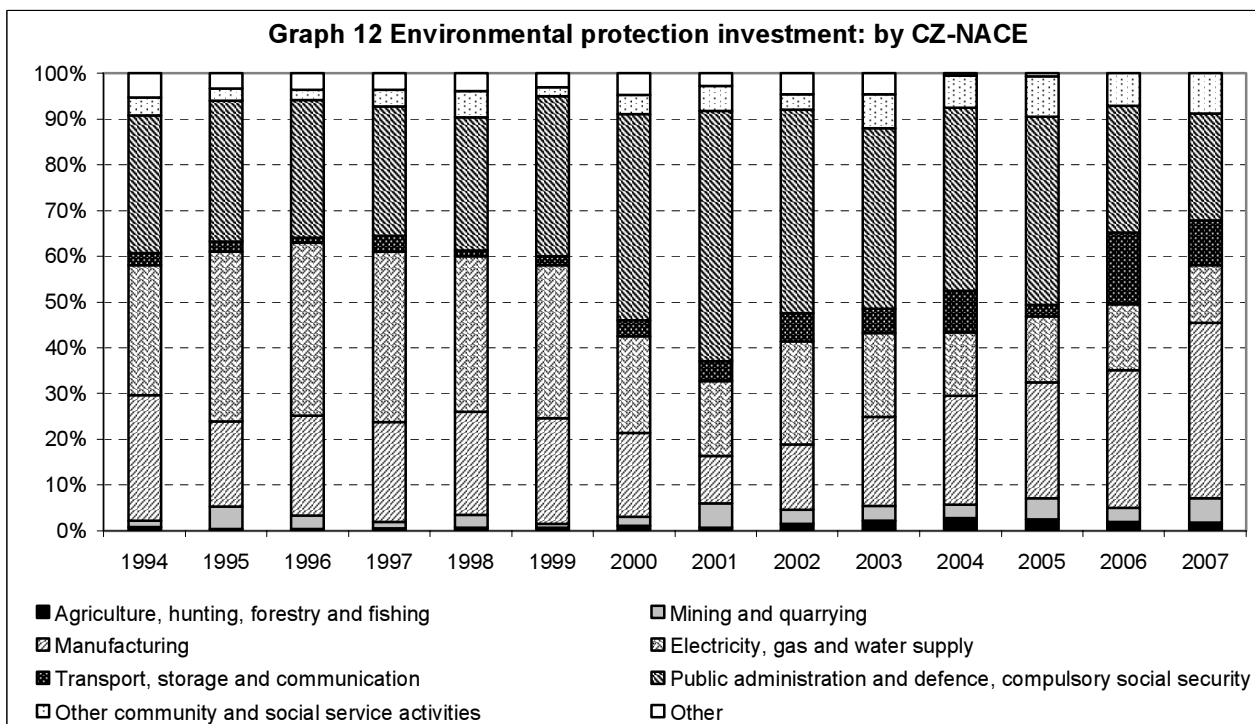
Therefore, environmental protection investment can be broken down by type of ownership – Graph 10 shows the shares of environmental protection investment by type of ownership for the years 1994–2007. Dominance is apparent for investment by businesses in municipal ownership belonging to territorial self-governing units – municipalities, regional offices – or to legal persons founded by municipalities or regional offices. It is followed by investment by businesses in mixed ownership which is assigned to businesses established by more than one domestic founder with various types of ownership.

Private or state-owned businesses invested the same amount of money in 1994–2007, namely 13% of the total investment volume. Internationally owned businesses invested CZK 31 billion (current prices) over the same period, which made up 9% of the total volume of environmental protection investment. The shares of individual types of ownership in total environmental protection investment are shown in Graph 11.



Graph 12 shows the distribution of environmental protection investment by CZ-NACE activity. Since the mid-1990's the biggest environmental protection investment was made by enterprises engaged in electricity, gas and water supply, followed by enterprises of public administration, defence and compulsory social security.

Among the contributors to environmental protection investment was manufacturing whose share has been on the increase since 2001. Before 2003 investment forms which included questions on environmental investment were sent to enterprises engaged in all the range of CZ-NACE activities, but starting from 2003 under reporting obligation are only non-financial corporations classified to the following CZ-NACE activities: agriculture, forestry, mining and quarrying, manufacturing, electricity, gas and water supply, land transport and air transport (CZ-NACE 01, 02, 10-40, 41, 60, 62), sewage and refuse disposal, sanitation and similar activities, and recycling (CZ-NACE 90, 37) and public administration, defence and compulsory social security (CZ-NACE 75).



The graph shows that investment by other CZ-NACE activities made up only a small part of total environmental protection investment (maximum 5%), which makes obvious that the sampling parameters for statistical form ŽP 1-01 are set in view of reducing the response burden.