



## STATISTIČNE INFORMACIJE RAPID REPORTS

28. DECEMBER 2006  
28 DECEMBER 2006

št./No 209

### 27 OKOLJE ENVIRONMENT

št./No 3

#### OKOLJE, SLOVENIJA, 2005

ENVIRONMENT, SLOVENIA, 2005

- ▶ V letu 2005 je bilo za javni vodovod načrpanih 163,5 milijona m<sup>3</sup> sveže vode. Večina te vode je bila načrpana iz podzemne vode, zato je skrb za ohranjanje zadostnih količin podzemnih vod in za ohranjanje njihove kakovosti v Sloveniji še toliko pomembnejša.
- ▶ Izguba vode zaradi dotrajanih vodovodnih omrežij se postopno zmanjšuje. Po letih prehajanja javnih vodovodov v upravljanje poslovnih enot s koncesijo se ta omrežja postopoma obnavljajo.
- ▶ V letu 2005 je bilo v Sloveniji 143,3 milijona m<sup>3</sup> odpadnih voda iz javne kanalizacije, to je za 11,8 % več kot v letu 2004 in za 14,2 % več kot v letu 2003.
- ▶ V letu 2005 je bilo v Republiki Sloveniji v industriji načrpanih 73.902,225 tisoč m<sup>3</sup> vode.
- ▶ V letu 2005 je bilo namakanih 1.812 ha kmetijskih zemljišč. Od njiv in vrtov je bilo namakanih 1252 ha površin, kar predstavlja 69 % vseh namakanih zemljišč, od sadovnjakov je bilo namakanih 560 ha površin, kar predstavlja preostalih 31 % namakanih zemljišč.
- ▶ Za namakanje kmetijskih zemljišč je bilo porabljenih 2,3 milijona m<sup>3</sup> vode.
- ▶ V letu 2005 je nastalo povprečno 422 kg komunalnih odpadkov na prebivalca oziroma 1,16 kg na osebo na dan.
- ▶ Na odlagališčih za nenevarne odpadke je bilo odloženih 752 546 ton vseh odpadkov; od tega 658 572 ton komunalnih odpadkov.
- ▶ V letu 2005 je v proizvodnih in storitvenih dejavnostih nastalo 5 669 138 ton odpadkov, od tega 126 848 ton nevarnih odpadkov.
- ▶ Od skupne količine odpadkov, nastalih v Sloveniji v letu 2005, smo predelali ali ponovno uporabili 51,7 % odpadkov, preostanek pa smo odstranili ali začasno uskladiščili.
- ▶ Končna škoda, ki so jo povzročile elementarne nesreče v letu 2005, znaša po oceni 18 797 mio. SIT, kar je za 4,5 % več kakor leta 2004. Vrednost nastale škode je bila najvišja v kmetijstvu, saj ta po končni oceni znaša 10 143 mio. SIT, to je za 36,5 % več kot v letu 2004.
- ▶ V letu 2004 je delež investicijskih sredstev za varstvo okolja znašal 6,1 % od vseh v letu 2004 ustvarjenih investicij (v nova osnovna sredstva v podjetjih, družbah in organizacijah, ki so znašala 1 001 550 mio SIT).
- ▶ V celotni strukturi investicij za varstvo okolja v letu 2004 obsegajo največji delež investicije za ravnjanje z odpadnimi vodami (več kot 36 %), v celotni strukturi tekočih izdatkov pa obsegajo največji delež tekoči izdatki za odstranjevanje odpadkov (več kot 57 %).
- ▶ In 2005, 163.5 million m<sup>3</sup> of water was abstracted for the needs of public water supply. The major part of water was abstracted from groundwater sources, so it is vital to provide adequate quantities and good quality of water in these sources.
- ▶ Loss of water due to old water networks keeps decreasing. Upon transition in the management from public water supply organisations to business entities with concession, water networks are being renewed.
- ▶ In 2005, 143.3 million m<sup>3</sup> of water was discharged from the public sewage system in the Republic of Slovenia, which is 11.8% more than in 2004 and 14.2% more than in 2003.
- ▶ In 2005, 73,902,225 thousand m<sup>3</sup> of water was pumped in industry in the Republic of Slovenia.
- ▶ In 2005, 1,812 ha of agricultural land were irrigated. Irrigated were 1,252 ha of gardens and fields (69% of all irrigated land) and 560 ha of orchards, which is the remaining 31% of irrigated land.
- ▶ For land irrigation, 2.3 million m<sup>3</sup> of water was used.
- ▶ In 2005, the average amount of municipal waste per capita was 422 kg, which amounts to 1.16 kg of waste per capita per day.
- ▶ 752,546 tons of waste were landfilled to non-hazardous (municipal) landfill sites, of these 658,572 tons of municipal waste.
- ▶ In 2005, 5,669,138 tons of waste were generated in production and service activities, of these 126,848 tons of hazardous waste.
- ▶ Concerning the total amount of waste generated in Slovenia in 2005, 51.7% of wastes were recovered or reused and the rest of wastes were disposed or in temporary storage.
- ▶ In 2005 the final data on estimated damage amounted to SIT 18,797 million, which was 4.5% more than in 2004. The estimated damage was highest in agriculture where it amounted to SIT 10,143 million or 36.5% more than in 2004.
- ▶ In 2004 the share of gross fixed capital formation for environmental protection amounted to 6.1% of the total gross fixed capital formation in 2004 (for new fixed assets in enterprises, companies and organisations that amounted to SIT 1,001,550 million).
- ▶ The highest share in the structure of gross fixed capital formation for environmental protection in 2004 was that of surface waters (36%). The highest share in the structure of current expenditure for environmental protection for 2004 was that of current expenditure for waste removal (57%).

## VODE

Statistična raziskovanja voda izvajamo v sklopu okoljskih statistik. Sodijo med temeljna raziskovanja na tem področju. Zbiranje in analiza podatkov ter oblikovanje kazalnikov ustrezone sporočilne vrednosti na področju statistike voda so metodološko, organizacijsko in časovno precej zahtevni postopki. To še posebej velja za ocene in poročanje o trendih v zvezi s trajnostnim ravnanjem z vodnimi viri.

Področje statistike voda je šele nedavno začelo izvajati načela evropskih direktiv. Evropska okvirna vodna direktiva 2000/60/ES uvaja nov pristop k zbiranju podatkov in informacij, ki naj bi zagotavljal večjo preglednost pretoka informacij ter jasnejše razločevanje med informacijskimi potrebami vpletenih na različnih nivojih.

Podatke, ki ponazarjajo stanje na področju gospodarjenja z vodnimi viri v Sloveniji, zbiramo z letnimi statističnimi raziskovanji, ki nam jih pošljajo podjetja in organizacije iz predelovalnih dejavnosti, rudarstva, kmetijstva in ribištva, gozdarstva, vodnega gospodarstva, komunalne dejavnosti in krajevne skupnosti, ki upravljajo javni vodovod in javno kanalizacijo.

Osnovni podatki so meritve vodometerov, ki so nameščeni na vodnih virih in proizvodnih napravah. Kjer vodometer ni, so količine zajete vode ocenjene na podlagi normativov za določeno panogo dejavnosti, na osnovi glavnega projekta, obratovalnega časa in zmogljivosti črpalk ali na podlagi strokovne ocene.

Razpoložljive količine vode v Sloveniji so odraz klimatoloških, hidroloških, reliefnih in geoloških razmer, posledično njihova neenaka razporeditev na posameznih območjih pogojuje obstoj različnih vodnih režimov.

Nacionalni program varstva okolja navaja vodno bogastvo Slovenije kot eno največjih primerjalnih prednosti, s katerim je treba sonaravno gospodariti. Tudi upoštevanje priporočil vodne direktive narekuje takšno porabo vode v vseh sektorjih, da bodo dolgoročno zaščiteni razpoložljivi vodni viri in njihovo dobro kemijsko in ekološko stanje.

Uporaba vode predstavlja enega od temeljnih stikov človeka z vodnim okoljem in naravnim kroženjem vode. Oblike uporabe vode segajo od povsem primarne uporabe, nujne za zadovoljevanje vsakdanjih življenjskih potreb, do tistih posebnih oblik uporabe, ki so pogojene z izvajanjem različnih dejavnosti.

Oskrba z vodo poteka v Sloveniji različno, bodisi preko sistemov javne oskrbe gospodinjstev, javnih ustanov in deloma poslovnih subjektov iz gospodarstva, ali pa na način neposrednega zajemanja vode iz vodnih virov oziroma samooskrbe, kar je prevladujoč način oskrbe v gospodarskih dejavnostih.

V raziskovanje o javni oskrbi s pitno vodo smo v letu 2005 zajeli 534 vodovodnih sistemov, ki oskrbujejo 4 225 naselij. Predmet opazovanja niso bili individualni vodovodi in drugi manjši vodooskrbni sistemi, ki zagotavljajo povprečno manj kot 10 m<sup>3</sup> vode na dan ali oskrbujejo manj kot 50 prebivalcev; ti v celoti oskrbujejo le majhen delež prebivalcev Slovenije.

## WATERS

Statistical water surveys are integral part of environmental statistics; they are considered the most fundamental ones in that field. Data collection and analysis as well as development of indicators of appropriate informative value in the field of water statistics are considered pretty demanding from methodological, organizing and time viewpoint. That is particularly evident by assessing and reporting on sustainability trends related to water management.

Water statistics in connection with implementation of principles of European water directives belong to a more recent date. The Water Framework Directive 2000/60/EC introduces a new approach to data and information collection, providing a more streamlined process and a clearer distinction between the information needs of different actors at different levels.

Data which illustrate the state of water management in Slovenia are collected from the annual reports forwarded by enterprises and organizations from the fields of manufacturing, mining and electricity supply, agriculture and fishing, forestry and hunting, water management, community service activities, and from local communities which manage public waterworks and sewage.

All data are entered on the basis of measurements made with water gauges placed in water resources and production installations. If there is no water gauge, the quantities of collected water are estimated on the basis of the norms for a given branch of activity, main project, operating times and pumping station capacity, or on the basis of an expert estimate.

Water availability in Slovenia is reflected by climatic, hydrological, relief and geological circumstances; consequently, existence of different water regimes is strongly influenced by its uneven spatial distribution.

The National Environmental Action Programme indicates the abundance of water in Slovenia as one of the greatest comparative advantages, which should be managed in a sustainable way. Also consideration of principles of the Water Framework Directive impose such use of water in all sectors that in the long term will protect available water resources and provide their good chemical and ecological status.

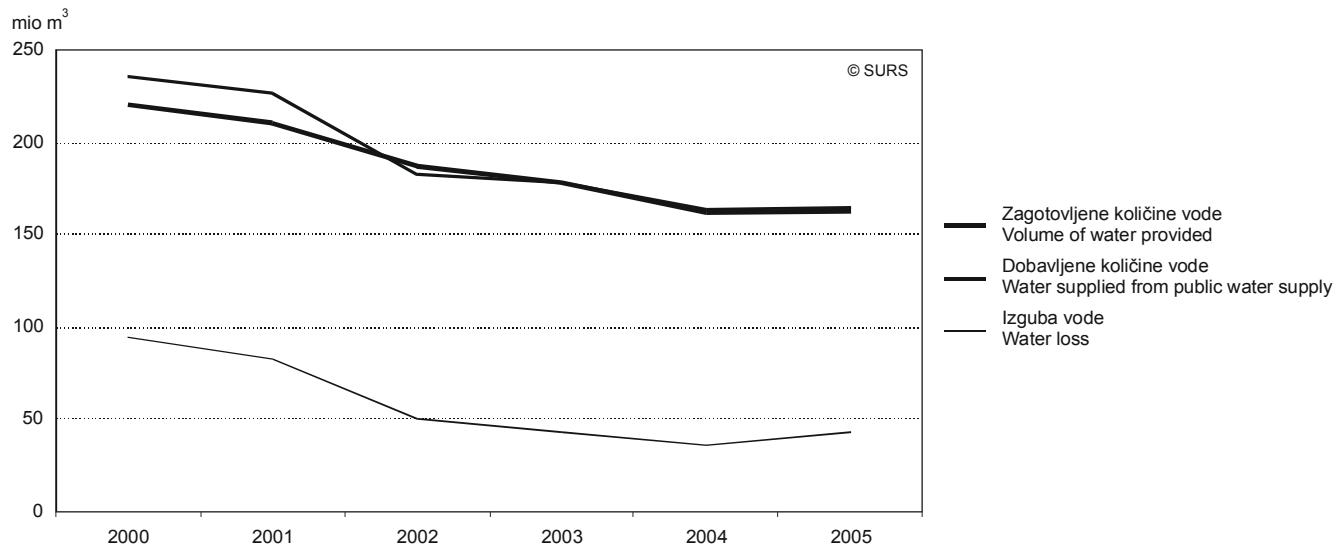
Water use presents one of the most fundamental human contacts with water environment and natural water cycle. Water uses range from primary one, indispensable for meeting vital human necessities, to those special ones, arising from performing different activities.

Water supply in Slovenia is performed either by public water supply systems aimed for households, public institutions and partly economic sectors or by immediate withdrawal, i.e. self supply, which is the predominant way in case of many business entities.

534 public water supply systems, supplying 4,225 settlements, were selected as observation units in 2005. Individual water supply systems and other smaller water supply systems providing less than an average of 10 m<sup>3</sup> of water per day or serving less than 50 persons were not included as observation units.

**Slika 1: Javna oskrba z vodo, Slovenija, 2000-2005**

Chart 1: Public water supply, Slovenia, 2000-2005



Iz slike 1 je razvidno, da so v obdobju 2000-2005 skupne dobavljene količine vode iz javnih vodovodnih sistemov nihale po letih s tendenco zmanjševanja skupne dobave, z izjemo leta 2005, ko je bilo zabeleženo blago povečanje glede na preteklo leto, in sicer za 0,7 %; vzrok za to je rahlo povečanje izgub vode v omrežju glede na prejšnje leto. V letu 2005 je skupna dobavljena količina voda znašala 165,2 milijonov m<sup>3</sup>.

Lahko rečemo, da se izgube vode iz leta v leto – z izjemo leta 2005 – polagoma zmanjšujejo, absolutno in relativno. Upoštevati moramo sicer, da je to deloma tudi posledica metodoloških sprememb; po prenovljeni definiciji namreč štejemo med izgube vode samo vodo, izgubljeno zaradi dotorajnih omrežij, ne pa tudi prelivov; zdaj spremljamo ločeno tudi količine dobavljene, vendar neobračunane vode (voda za čiščenje cest in za spiranje omrežja, za gašenje požarov itd.). Ponekod pa upravljavci dejansko obnavljajo omrežja in tudi to prispeva k zmanjševanju izgube vode na ravni države.

Javno dobavljene količine vode, namenjene za oskrbo različnih dejavnosti, kažejo v enakem obdobju nenehno zmanjševanje tako absolutno kot relativno, tudi zaradi uvajanja zaprtih sistemov kroženja vode (recirkulacije) in ponovne uporabe vode v proizvodnih procesih.

Poraba vode pri gospodinjstvih kaže v obravnavanem obdobju blažja nihanja med leti, toda v zadnjih treh letih podatki kažejo stalno in postopno zmanjševanje glede na predhodna leta. V letu 2005 je dobavljena količina vode znašala 84,8 milijona m<sup>3</sup>, kar je za 2 % manj kakor leto prej.

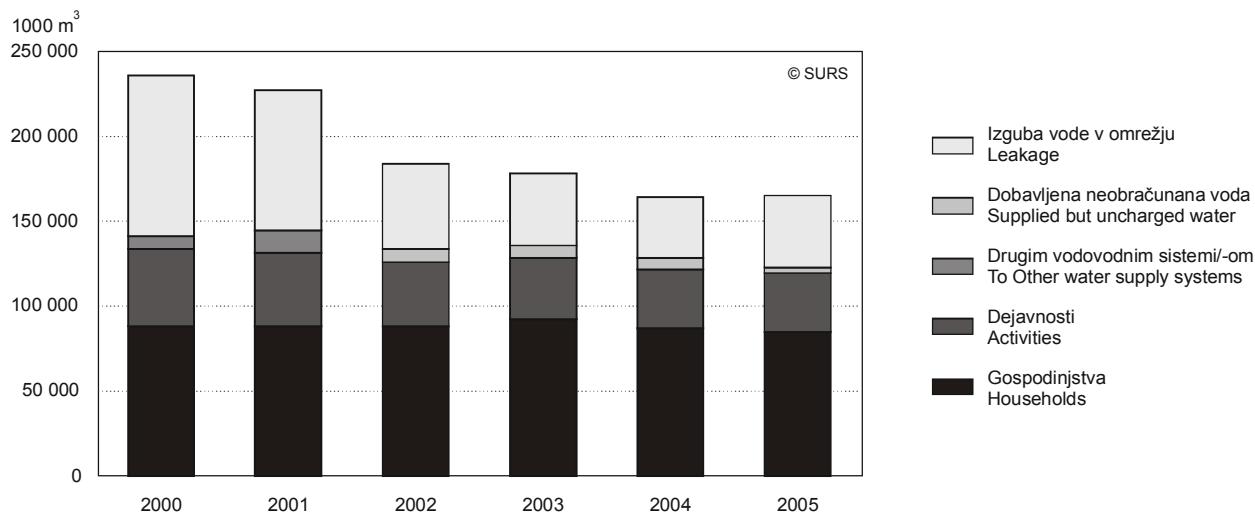
Chart 1 shows that the total volume of water supplied in the observed period (2000-2005) by public water supply varied between years with tendency to decreasing, except in 2005, in which a slight growth by 0.7% was recorded compared to the preceding year. The reason for that is some increase in water losses. Total quantity of water supplied amounted to 165.2 million m<sup>3</sup>.

Otherwise, we can say that water losses (except in 2005) keep gradually declining from year to year, in absolute and relative terms. In addition, it has to be taken into consideration that this effect is partly caused by methodological revision; namely, according to updated definitions, only the loss due to old water networks and not water spilling is considered as leakage. The quantities of supplied but uncharged water (for road cleaning, for water pipe cleaning, for fire extinguishing, etc.) are monitored separately. Some water supply managers modernise the water networks, which has influenced the data at national level.

The quantity of water supplied by public water supply to economic sectors indicates constant decrease in the observed period, both absolutely and relatively. This is partly the result of the introduction of closed loop systems and reuse of water in production processes.

Water use by households in the same period under review indicates slight changes among individual years; however, in the latter three years the data show constant and gradual decrease in quantities of water used in comparison with preceding years. In 2005, 84.8 mio m<sup>3</sup> of water was supplied, which is by 2% less than previous year.

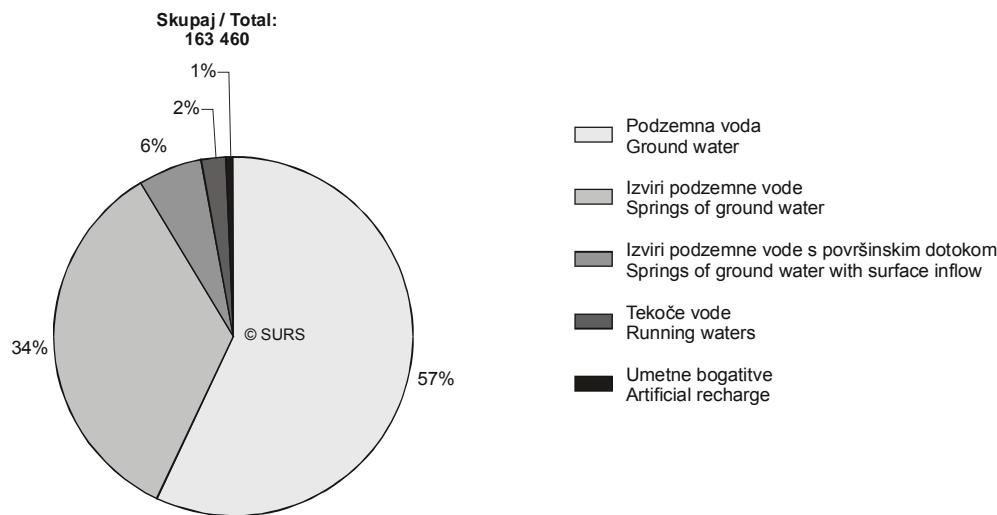
**Slika 2: Voda, dobavljenia iz javnega vodovoda, po vrstah dobave, Slovenija, 2000-2005**  
 Chart 2: Water supplied from public waterworks by type of supply, Slovenia, 2000-2005



Sicer pa porazdelitev iz javnih vodovodnih sistemov dobavljenih vode po porabnikih kaže, da največji delež v skupni dobavi vode pripada gospodinjstvom. Ta se celo pologoma povečuje (od leta 2003 je bil vedno izkazan nadpolovični delež), medtem ko je bil delež dobave gospodarskim subjektom precej ustaljen in je v zadnjih dveh letih znašal 21% (slika 2).

Distribution of water supplied by categories of users proves that the highest share in the total quantity of water supplied belongs to households; this proportion keeps increasing (from 2003 on the share has been more than 50%), while the share of economic sectors is rather steady; in the last two years it amounted to 21% (Chart 2).

**Slika 3: Javna oskrba z vodo po vodnih virih v 1000 m<sup>3</sup>, Slovenija, 2005**  
 Chart 3: Public water supply by water sources in 1000 m<sup>3</sup>, Slovenia, 2005



V letu 2005 je bilo za javni vodovod zagotovljenih skoraj 163,5 milijona m<sup>3</sup> vode, od tega je večina bila načrpana iz podzemnih virov. V Sloveniji je sicer oskrba z vodo iz javnih vodovodnih sistemov tradicionalno povezana s črpanjem podzemne vode; v letu 2005 je znašal delež načrpane vode, po izvoru iz podzemnih virov, 91 % (upoštevajoč tudi izvire podzemne vode s površinskim dotokom). Zato so prizadevanja za ohranjanje zadostnih količin podzemne vode in njihove ustreznne kakovosti še toliko pomembnejša.

Oskrba s pitno vodo iz površinskih voda tudi zaradi njihove slabe kakovosti postaja vse manj pomembna. V letu 2005 je bil njen delež ocenjen na 2 %. (slika 3)

In 2005, almost 163.5 million m<sup>3</sup> of water was provided for the needs of public water supply, of which the major part was abstracted from ground water sources. Public water supply in Slovenia is traditionally connected with abstracting from ground water sources. The share of water provided for public supply in 2005, originating from ground water sources (taking into account springs of ground water with surface inflow), amounted to 91%. The efforts to provide adequate quantities and good quality in these sources are therefore vitally important.

Public water supply from surface waters is getting less significant, also as a consequence of deteriorated quality; in 2005 the share was estimated at 2% (Chart 3).

Če opazujemo zagotovljene količine vode po povodjih, ugotovimo, da se največ vode načrpa na območju, ki pripada povodju Donave (v opazovanem obdobju se je njen delež gibal med 85 in 87 %), kar je skladno s hidrografskimi značilnostmi Slovenije.

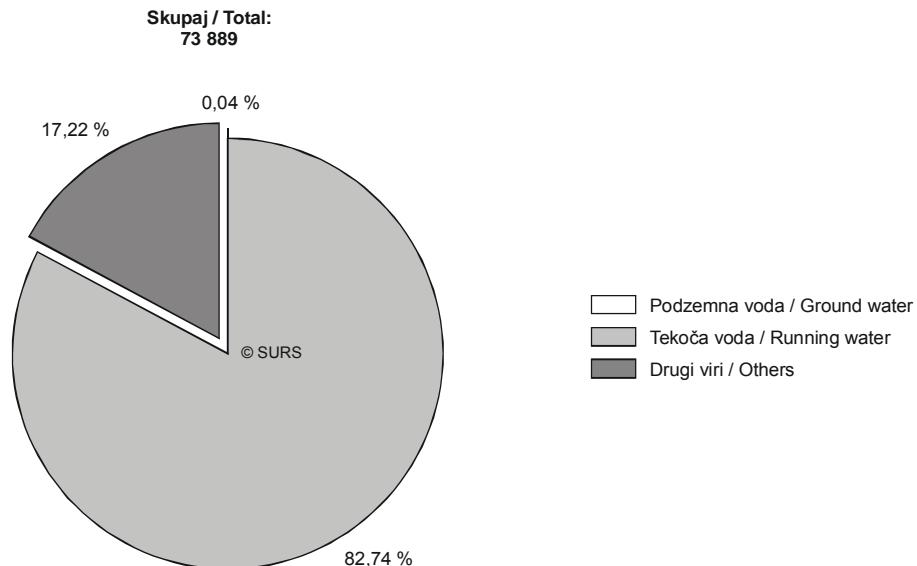
Podatke o izkoriščanju voda v industriji nam sporočajo vsi poslovni subjekti iz dejavnosti rudarstvo, predelovalnih dejavnosti in oskrba z elektriko, plinom in vodo, ki letno porabijo 10 000 m<sup>3</sup> vode ali več.

Observing quantities of water provided by river basins, we can conclude that the greatest amount of water has been abstracted on the territory which belongs to the Donava river basin (in the observed period its share varied between 85% and 87%), which is quite reasonable, having in mind hydrographical characteristics of Slovenia.

Data on water exploitation are reported also by enterprises from the fields of manufacturing, mining and electricity supply that exceed the limit of 10,000 m<sup>3</sup>/year of water supplied.

**Slika 4: Preskrba podjetij z vodo po virih iz lastnega zajetja v mio m<sup>3</sup>, Slovenija, 2005**

Chart 4: Self supply of enterprises with water in mio m<sup>3</sup>, Slovenia, 2005



Skoraj celotna preskrba poslovnih subjektov iz gospodarstva z vodo je v letu 2005 izvirala iz lastnih zajetij. Od tega je bila večina načrpane vode (82,74 %) zajeta iz tekočih voda. Podzemna voda je imela le neznaten 0,04-odstotni delež. Ostali viri so imeli 17,22-odstotni delež (slika 4).

V letu 2005 je bilo v Sloveniji za različne namene v industriji porabljenih 74 926 milijonov m<sup>3</sup> vode (sveže in prečiščene), to je za 1,3 % več kot v letu 2004 in za 14,8 % več kot v letu 2003. To pomeni, da se poraba vode z leti povečuje. V letu 2005 je bilo 97,9 % vse uporabljene vode dejansko voda, namenjena proizvodnim procesom, 2 % te vode je bilo porabljeni za hlajenje, preostanek pa je bil uporabljen za sanitarne in druge namene.

Manjša količina uporabljene vode izhlapi ali se vgradi v sam proizvod, večina te vode pa se izpusti nazaj v водne prejemnike ali v javno kanalizacijo, prečiščena ali neprečiščena. Neprečiščena voda običajno pridobi med industrijskim procesom znatno spremenjene lastnosti, vsebuje lahko različna onesnaževala, ki vplivajo na njeno kakovost in so lahko nevarna za zdravje človeka in druge žive organizme ipd.

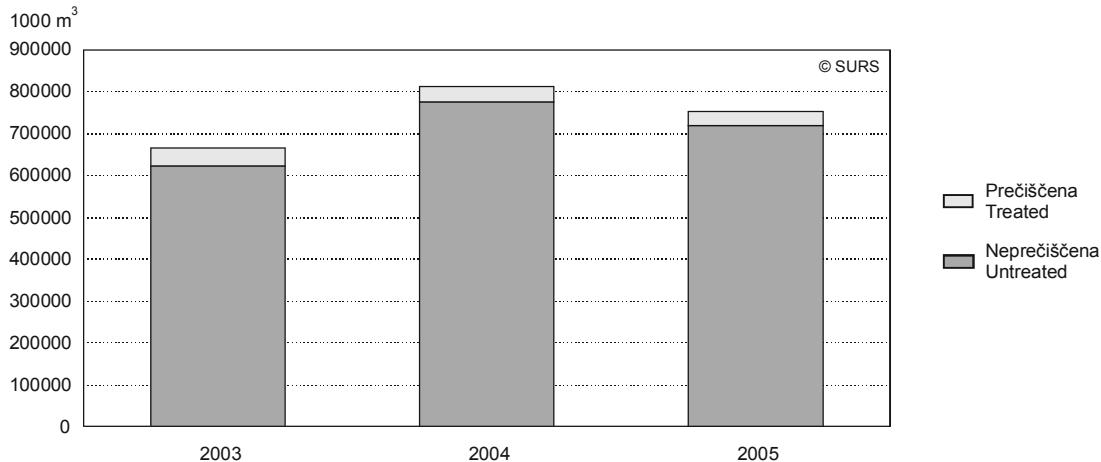
Almost total amount of water supplied to business entities originates from self supply, the major part of which is from running waters. In 2005, its share from this source was 82.74%. Ground water contributed a negligible share of 0.04% and other sources 17.22% (Chart 4).

In 2005, industrial enterprises used 74,926 million m<sup>3</sup> of water (fresh and treated) for different purposes; this is 1.3% more than in 2004 and 14.8% more than in 2003. It means that water use keeps increasing. 97.9% of water was used for production processes, 2% for cooling and the rest for other purposes.

While some water evaporates or is incorporated into the product itself, most is discharged back into water recipients or into public sewerage, treated or not treated. Untreated water, usually with considerably altered characteristics in the industrial process, may contain contaminants that degrade water quality and pose a threat to human health and other living creatures.

**Slika 5: Količine prečiščene in neprečiščene odpadne vode v industriji, Slovenija, 2003-2005**

Chart 5: Quantities of treated and untreated waste water in industry, Slovenia, 2003-2005



V letu 2005 je 718,9 milijona m<sup>3</sup> odpadne vode, nastale v slovenski industriji, ostalo neprečiščene, to je 7,3 % manj kot v letu 2004 in 24,2 % več kot v letu 2003. Njen delež pa je predstavljal 69 % celotne nastale odpadne vode v industriji. Iz podatkov na sliki 5 je razvidno, da se količina prečiščene odpadne vode v opazovanem obdobju stalno zmanjšuje.

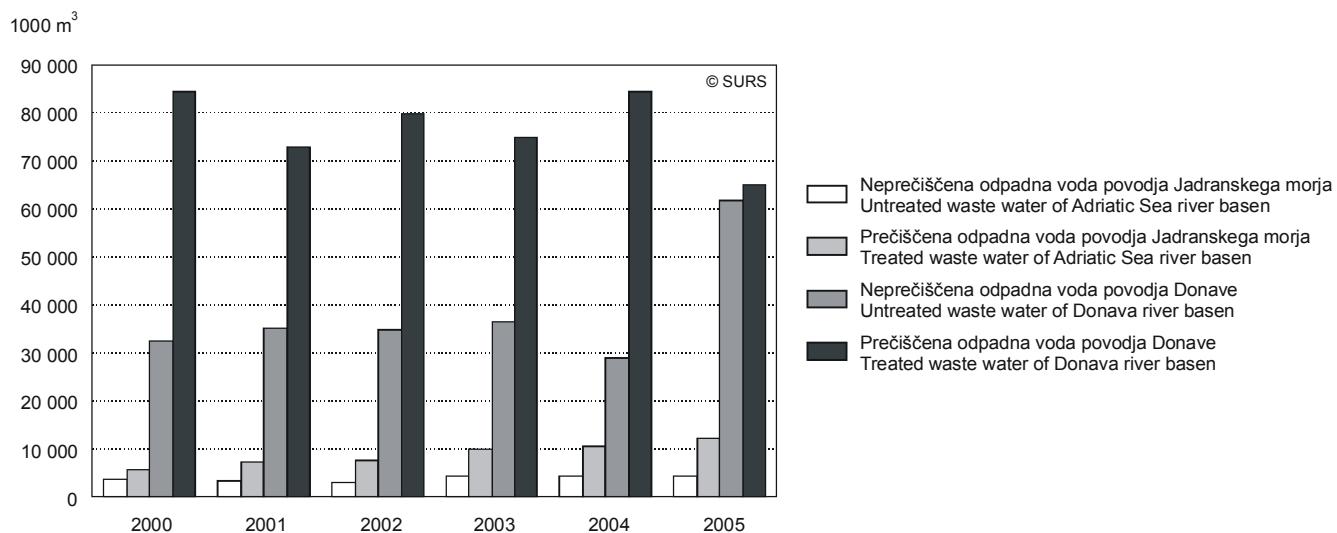
Podjetja, ki upravljajo kanalizacijsko omrežje, poročajo tudi o količinah odpadne vode, in sicer glede na izvor njenega nastanka, načine njenega prečiščevanja ter glede na različna mesta izpusta te vode.

In 2005, 718.9 million m<sup>3</sup> of generated waste water in Slovenian industry remained untreated, which is 7.3% less than in 2004 and 24.2% more than in 2003. Its share presented 69% of total waste water generated in industry. Based on the data from Chart 5 it is evident that the quantity of treated waste water in the observed period tends to be decreasing.

Enterprises which manage public sewerage network report also on the quantities of waste water as follows: regarding the source, the way of treatment and the place of release.

**Slika 6: Količine izpuščene odpadne vode iz javnega kanalizacijskega omrežja po povodjih, Slovenija, 2001-2005**

Chart 6: Quantities of waste water released from the public sewage system by river basins, Slovenia, 2001-2005



V letu 2005 je bilo iz javne kanalizacije odvedenih 143,3 m<sup>3</sup> odpadnih voda različnega izvora, kar je za 11,8 % več kot v letu prej. Od tega jih je bilo 50,8 % iz gospodinjstev, 28,8 % so druge vode (padavinska ipd.), 12,5 % iz industrijskih dejavnosti, preostanek pa so bili drugi viri.

Razmerje med prečiščeno in neprečiščeno odpadno vodo v letu 2005, opazovano po povodjih, kaže, da je to v povodju Donave bolj ugodno, ker je delež prečiščene vode tu večji kot v povodju Jadranskega morja, čeprav je še vedno manjši od deleža neprečiščene odpadne vode.

In 2005 143.3 million m<sup>3</sup> of waste water of different origin was discharged from public sewerage network, of which the highest share belonged to households (50.8%), to other waters (rain water, etc.) 28.8%, to economic sectors 12.5%; the rest are other sources.

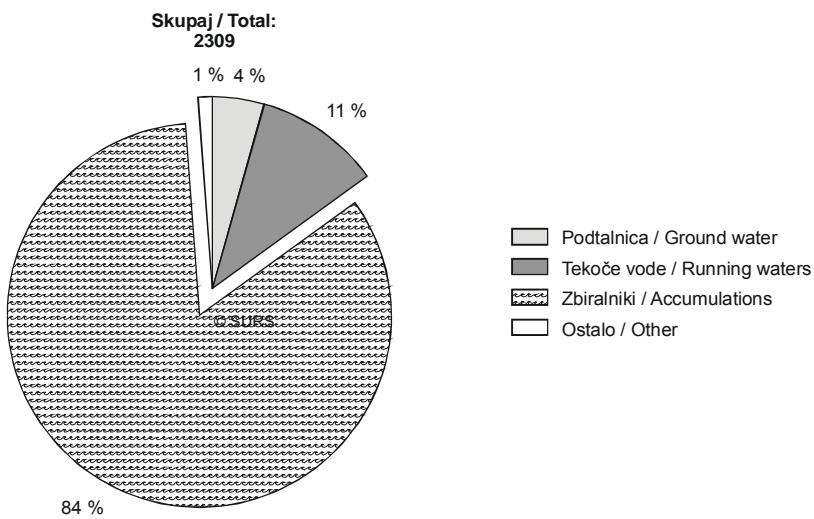
The relation between treated and untreated waste water in 2005, observed by river basins, appears to be more advantageous in the Donava river basin; the share of treated water was greater than in the Adriatic Sea river basin, though still lower than the share of untreated waste water in the domestic

Podobno razmerje ugotovimo tudi v predhodnih letih opazovanega obdobja.

Namakalni sistemi so največji potrošniki vode na področju kmetijskih dejavnosti. Podatke o namakanju sporočajo upravljavci namakalnih sistemov. Seznam upravljavcev namakalnih sistemov se dopolnjuje s podatki Ministrstva za kmetijstvo, gozdarstvo in prehrano.

Poraba vode za namakanje je opredeljena predvsem z dvema dejavnikoma. Prvi in pomembnejši je velikost namakanih površin z redno oskrbo. Drugi dejavnik, ki vpliva na raven namakanja, pa sta tehnika namakanja in namakalna praksa, ki preprečuje ali pospešuje razsipavanje vode in ogrožanje okolja.

**Slika 7: Namakalna voda po vodnih virih v 1000 m<sup>3</sup>, Slovenija, 2005**  
Chart 7: Irrigation water by water sources in 1000 m<sup>3</sup>, Slovenia, 2005



V letu 2005 je bilo namakanih 1 812 ha zemljišč. Za namakanje je bilo porabljenih 2,3 milijona m<sup>3</sup> vode. Na osnovi podatkov iz grafa 7 ocenujemo, da so zbiralniki predstavljali 84 % namakalne vode, tekoče vode 10,6 %, iz podzemnih virov je bilo odvzetih 4,4 % namakalne vode, 1 % vode pa iz drugih virov.

Po načinu namakanja je prevladovala tehnika oroševanja z razpršilci, saj je to v skupni površini 1 812 ha namakanih zemljišč zavzemalo 95 % teh zemljišč, ostalih 5 % zemljišč je bilo namakanih s kapljično namakalno tehniko.

## ODPADKI

Nastajanje odpadkov je postalo posebej pereč problem v zadnjih dveh desetletjih, ne samo zaradi velikega razmaha različnih gospodarskih dejavnosti, temveč tudi zaradi našega načina življenja, ki je prilagojen potrošniški družbi, v kateri – z neodgovornim ravnanjem – znatno prispevamo k nastajanju odpadkov.

Opazovanje in nadzor nad izvajanjem politike ravnanja z odpadki narekuje dobro poznavanje njihovih vplivov na človeka in njegovo naravno okolje, prostorsko razporeditev njihovega nastajanja, delež posameznih gospodarskih dejavnosti pri njihovem nastajanju kot tudi poznavanje nekaterih socio-ekonomskeih trendov, ki so pogostokrat gonilna sila degradacije okolja z odpadki.

Poleg komunalnih in njim po sestavi sorodnih odpadkov iz gospodinjstev so tu še različni odpadki iz gospodarskih dejavnosti, v katerih nastajajo tudi nevarni odpadki, s katerimi je treba ustrezno

basin. A similar relation is evident also in previous years of the observed period.

Irrigation is the largest water-consuming actor in the agricultural sector. Data on irrigation are reported by managers of irrigation systems. The list of irrigation system managers is updated with data from the Ministry of Agriculture, Forestry and Food.

Use of water for irrigation is linked to two factors. First and more important is the area served by regular water supply. The second factor, affecting the expansion of irrigation, is the extent to which techniques of application and land management prevent or promote water wasting and threatening of environment.

Irrigated area in 2005 was estimated at 1,812 ha. The volume of water used for irrigation amounted to 2.3 million m<sup>3</sup>. Based on the data in Chart 7 it is estimated that accumulations represented 84% of irrigating water, running waters 10.6%, only 4.4% of irrigating water was abstracted from ground water, while 1% originated from other sources.

By type of irrigating techniques dominates sprinkling; 95% of total 1,812 ha of irrigated area was irrigated by this technique; drop by drop technique presented only 5%.

## WASTE

Waste generation has been a particularly urgent problem in the past two decades, not only due to rapid development of different economic activities, but also due to the way we live in the consumer society, in which irresponsible behaviour contributes a lot to waste generation.

Monitoring and control over the implementation of policy linked to waste handling requires good knowledge of waste's impact on people and their living environment, spatial distribution of waste generation, contribution of individual economic sectors in generation thereof, as well as being familiar with some socio-economic trends, which are frequently driving forces of environment degradation linked to waste generation.

In addition to municipal waste and waste similar by composition to municipal waste, there are different types of waste from economic activities, including hazardous waste, which has to be managed in a proper way. In case it is not

ravnati. Če tega ni mogoče opraviti v Sloveniji, jih je treba izvoziti v tujino, kjer imajo na razpolago ustrezen tehnološki postopek.

Statistična raziskovanja o odpadkih smo na Statističnem uradu RS začeli izvajati že leta 1993, in sicer s triletno periodiko; od leta 2001 pa izvajamo raziskovanja o odpadkih letno in v sodelovanju z Agencijo RS za okolje; gre za pet statističnih raziskovanj s področja odpadkov – tri raziskovanja zajemajo industrijske odpadkov (ODP, ODP-Z in ODP-P), dve raziskovanji pa komunalne odpadke (KO-Z in KO-U). Pri izdelavi metodologije smo upoštevali zahteve slovenske zakonodaje in zahteve nove zakonodaja Evropske unije (Waste Statistics Regulation), hkrati pa smo vključili tudi priporočila Organizacije združenih narodov s področja statistike okolja.

Pri razvrščanju posameznih vrst odpadkov so poročevalske enote uporabljale Klasifikacijski seznam odpadkov (Katalog odpadkov); ta je bil objavljen kot priloga k Pravilniku o ravnanju z odpadki (Uradni list RS št. 20/01, 13/03). V tem seznamu so odpadki razvrščeni v skupine predvsem po izvoru odpadkov.

V letu 2005 je količina vseh nastalih odpadkov (komunalnih odpadkov in odpadkov, nastalih v proizvodnih in storitvenih dejavnostih) v Sloveniji znašala 6,514 milijona t, kar je za 4 % manj kot v predhodnem letu; toda iz strukture odpadkov ugotavljamo, da se je zmanjšala le količina nenevarnih odpadkov, in sicer za 5 %, količina nevarnih odpadkov pa se je povečala za 16 %. Na osnovi podatkov iz slike 8 je razvidno, da je razmerje med odpadki, nastalimi v letu 2005, ostalo enako, kot je bilo v letu 2004; to pomeni, da v celotni količini nastalih odpadkov zavzemajo nevarni odpadki le 2 %, nenevarni odpadki 98 %.

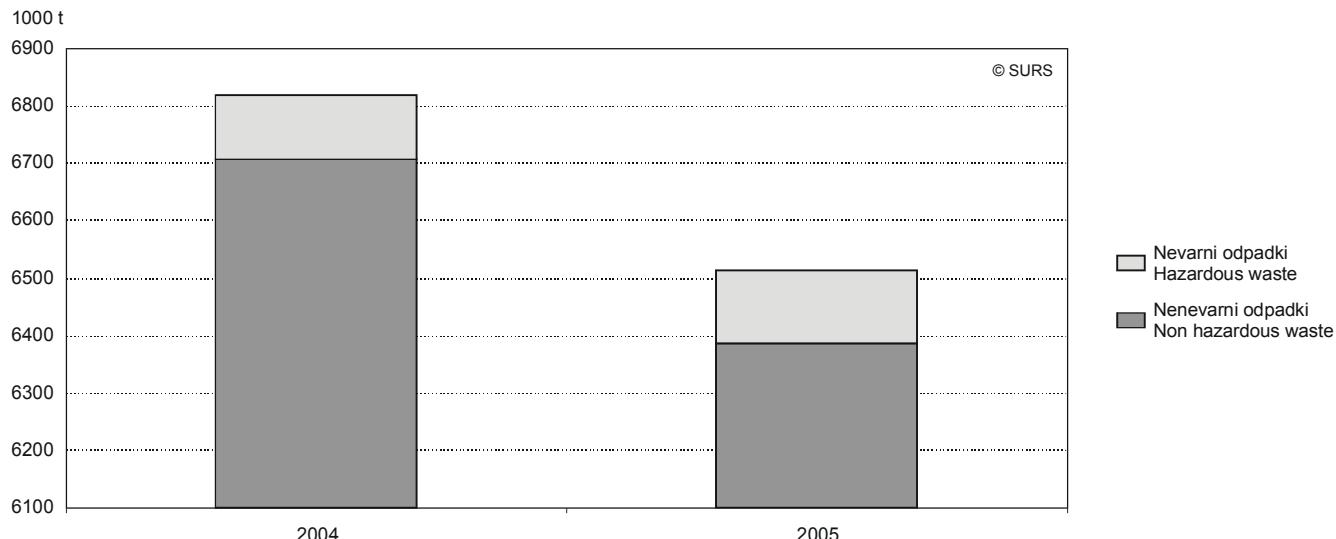
possible in Slovenia, hazardous waste must be exported to other countries having at disposal appropriate technology for its handling.

Carrying out of the statistical surveys on waste by the Statistical Office started in 1993, with three-year periodicity. However, since 2001 the Statistical Office together with the Environmental Agency of the Republic of Slovenia has been carrying out annually five surveys – three for industrial waste (ODP, ODP-Z and ODP-P) and two for municipal waste (KO-Z and KO-U). In formulating the methodology we took into account the current legislation of the Republic of Slovenia for the field of waste management and the new Waste Statistics Regulation (legislation of the EU). We also incorporated methodological elements of the United Nations relating to the field of environment statistics.

Waste has been classified by the reporting units according to the Waste Catalogue, which is part of the Regulation on Waste Management (OJ RS No 20/01). In this list waste is arranged into groups of waste, first of all with regard to the source of waste generation.

Total quantity of waste generated in Slovenia (municipal waste and waste generated by production and service activities) amounted to 6.514 million tons, which is 4% less than in the previous year. However, taking into consideration the structure of waste, we have estimated that only the amount of non-hazardous waste decreased, by 5%, while the amount of hazardous waste increased by 16%. Based on the data in Chart 8 it is evident that the proportion among these two types of waste keeps the same level in two successive years; in the total waste amount, hazardous waste represents only 2% and non-hazardous waste 98%.

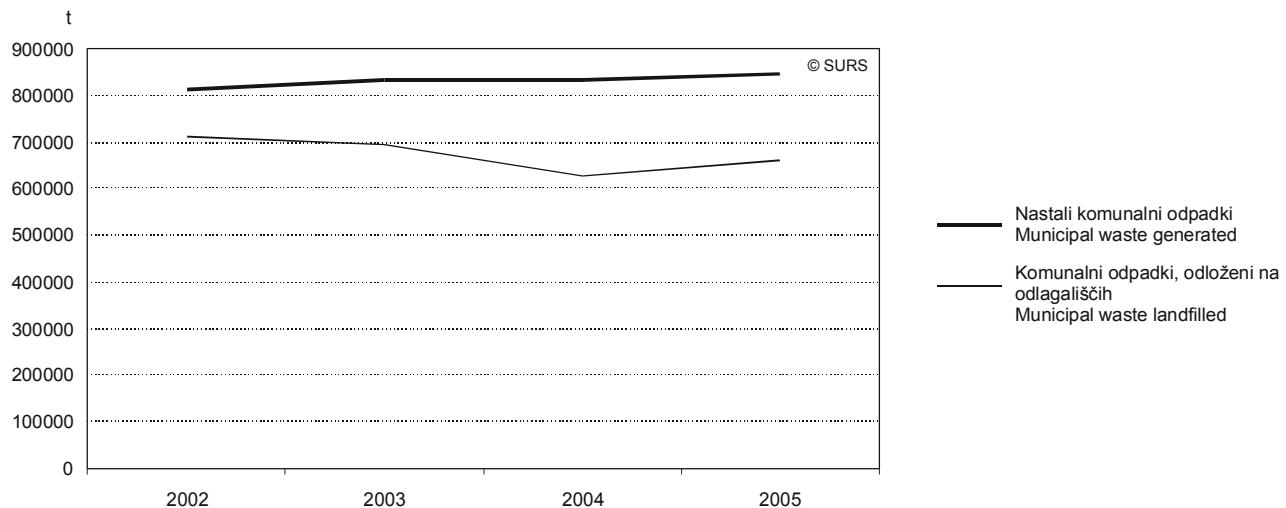
**Slika 8: Nastali nenevarni in nevarni odpadki, Slovenija, 2004-2005**  
Chart 8: Non-hazardous and hazardous waste, Slovenia, 2004-2005



V letu 2005 je v Sloveniji nastalo 844 949 t komunalnih odpadkov, to je za 5,4 % več kot v letu 2004. Večina teh odpadkov je bila odložena na odlagališčih, in sicer 658 572 t ali 78 %, kar pomeni, da je bil delež odloženih komunalnih odpadkov v skupni količini nastalih komunalnih odpadkov za 3 % večji kakor v predhodnem letu.

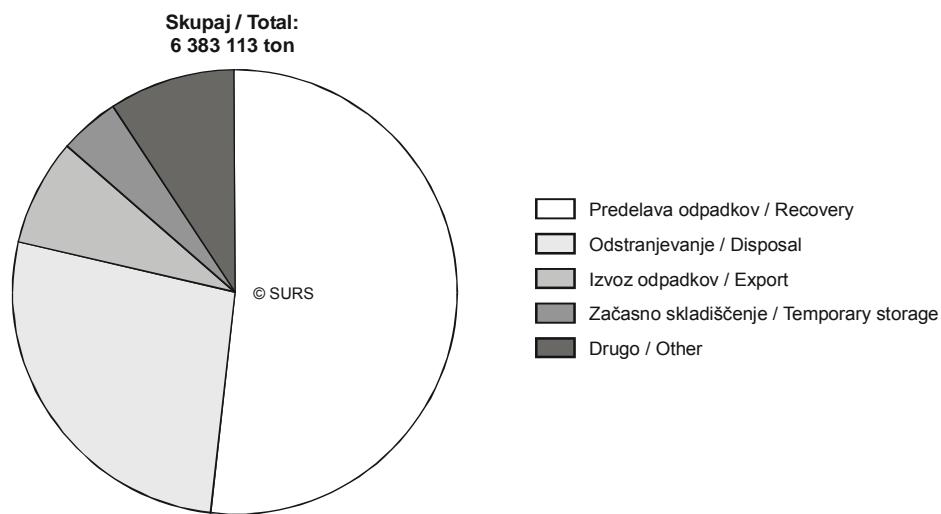
Recorded quantity of municipal waste generated in Slovenia in 2005 was 844,949 tons, which means that their quantity increased by 5.4% in comparison with the previous year. Most of municipal waste was discharged at municipal landfill sites, i.e. 658,572 tons or 78%; thus the share of municipal waste landfilled in 2005 was 3% higher than in the preceding year.

**Slika 9: Nastali in odloženi komunalni odpadki, Slovenija, 2002-2005**  
Chart 9: Municipal waste generated and landfilled, Slovenia, 2002-2005



Slika 10 prikazuje ravnjanje z odpadki v letu 2005. Obravnavane količine odpadkov so količine v Sloveniji nastalih odpadkov, ki smo jim pristeli količine v Slovenijo uvoženih odpadkov in odšeli količine v tujino izvoženih odpadkov. Od celotne količine odpadkov, ki je bila v letu 2005 obravnavana, je bilo predelanih 3 297 516 t (51,7 %) odpadkov, 1 718 613 t odpadkov (26,9 %) pa je bilo podvrženih enemu od postopkov odstranjevanja (sezig, odlaganje, izpust v vodo, trajno skladiščenje itd.).

**Slika 10: Ravnjanje z odpadki, Slovenija, 2005**  
Chart 10: Waste management, Slovenia, 2005



#### ELEMENTARNE NESREČE

Geološke, hidrološke, podnebne in druge naravne danosti slovenskega ozemlja odsevajo v izredni pokrajinski pestrosti, toda predstavljajo tudi sovplivajoči dejavnik okoljske ranljivosti ter nastopa nezaželenih pojavov, ki se odražajo kot naravne in druge nesreče, ki Slovenijo prostorsko in časovno različno prizadevajo. K povečanemu dogajanju nekaterih nesreč ter spremljajočim nevarnostim in tveganjem značilno prispevamo tudi ljudje – posredno ali neposredno – s svojimi

Chart 10 presents the way in which in 2005 we managed waste. Waste managed quantities are quantities of waste generated in Slovenia in 2005 plus waste imported minus waste exported. Out of the total amount of waste available for managing, 3,297,516 t (51.7%) of waste were recovered, while 1,718,613 t of waste (26.9%) underwent some of disposal processes (incineration, land filled, release into water, temporary storing, etc.).

#### NATURAL DISASTERS

Geological, hydrological, climatic and other natural characteristics of Slovenian territory have been reflected in its landscape variety; however, they are also the co-influencing factor in environmental vulnerability and occurring of unwanted phenomena, turning out to be natural and other disasters, which endanger Slovenia differently in time and space. Increased occurrence of some natural disasters and accompanied dangers and risks are significantly supported – indirectly or directly – by human activities and

dejavnostmi in nepremišljenimi posegi v okolje.

Dogajanja v naravi, ki prerastejo v nesreče, lahko ogrožajo življenje ali zdravje ljudi in živiljenjsko okolje ali povzročijo škodo in materialne izgube v gospodarstvu, infrastrukturi in premoženju posameznikov.

Naravne nesreče, ki lahko v Sloveniji pomenijo največjo nevarnost, so: poplave, potresne aktivnosti, zemeljski plazovi in požari. Druge naravne nesreče – neurja, toča, mraz, suša, epizootija ipd. – prav tako ogrožajo ljudi, ekosisteme in posamezne sestavine okolja, a so za zdaj bolj obvladljive.

Sicer pa sta obseg in vrsta posledic nesreč odvisna tudi od stopnje pripravljenosti družbene skupnosti kot celote na nesreče ter ustreznosti in pravočasnosti ukrepanja ob nesrečah.

Podatke o ocenjeni gmotni škodi, ki jo povzročajo elementarne nesreče v Sloveniji, zbiramo na SURS-u letno s statističnim vprašalnikom ELNES; zavezanci poročanja so občine.

Podatke o oceni gmotne škode lahko dobijo občine od občinskih ali regionalnih komisij za ocenjevanje škode, republiške komisije za ocenjevanje škode ali drugih strokovnih služb.

Namen cenitve škode je ugotoviti vrsto in obseg škod v vrednostnih kazalcih, in sicer po območjih (občinah in regijah), po vzrokih nastanka škode, po poškodovanih sredstvih in drugih dobrinah, po obliki lastnine le-teh ter po dejavnostih in času, v katerem je škoda nastala.

Rezultati cenitev se uporabljajo za določanje konkretnih ukrepov za odpravo nastale škode in za ugotavljanje velikosti izgub v primerjavi z BDP.

Občine pri izpolnjevanju navedenih vprašalnikov upoštevajo Uredbo o metodologiji za ocenjevanje škode, ki so jo povzročile elementarne nesreče (Uradni list RS, št. 67/03) in s tem enotna metodološka navodila, kar je pomembno zlasti, kadar gre za večje nesreče, kot so poplave in potresi.

Viri podatkov in obveznosti glede sporočanja ter uporabe podatkov so določeni z zakonom in mednarodnimi sporazumi.

Pri tem velja poudariti, da občine nimajo popolnega pregleda nad celoto nastalo škodo, zlasti ne nad zasebnimi in drugimi sredstvi.

Nekatere podatke zato prevzemamo tudi iz drugih razpoložljivih administrativnih virov.

Podatke o toči, poplavi, neurju, suši in potresu prevzemamo od leta 2001 od Ministrstva RS za obrambo, Uprave RS za zaščito in reševanje (URSZR), prav tako tudi podatke o požaru (letni bilten Naravne in druge nesreče v RS); podatke o oceni neposredne škode v kmetijstvu, nastale zaradi različnih škodljivcev in bolezni (hrusev ozig, virusi in fitoplazme ter hmeljeva uvelost), prevzemamo od Fitosanitarne uprave RS (FURS). Prevzeti podatki o škodah predstavljajo dejansko vrnjeno odškodnino.

Končna vrednost škode, ki so jo v letu 2005 povzročile elementarne nesreče, je bila ocenjena na 18 797 milijonov SIT, to je za 4,5 % več kakor leta 2004. Delež končne škode v primerjavi z BDP je znašal 0,3 % oz. prav toliko kot v predhodnem letu.

Z vidika področij dejavnosti sta v letu 2005 utrpeli največjo škodo kmetijstvo, lov in gozdarstvo ter promet, skladiščenje in zveze. Gmotna škoda v kmetijstvu je bila leta 2005 ocenjena na 10 143 milijonov SIT, to je 54 % vrednosti celotne škode zaradi elementarnih nesreč v letu 2005 v

reckless interference with natural environment.

Natural phenomena turning into disasters may endanger human life or health and living environment or may inflict damage and material losses in economy, infrastructure and individual property.

Disasters which seem to be the biggest danger for Slovenia are floods, thunderstorms, hail, drought and fire. Other disasters – avalanche (land-slip), epidemics, etc. – also endanger humans, ecosystems and environment.

In addition, the extension and type of disasters' consequences to a great extent depend on the readiness of the society as a whole for disasters and on the adequacy and timeliness of measures taken in case of disaster.

Data on estimated material damage caused by natural disasters in Slovenia are collected by the Statistical Office on yearly basis with the Statistical Questionnaire on Estimated Damage Caused by Natural Disasters (ELNECS), reported by municipalities.

Municipalities can get the estimation of the value of the damage from municipal and regional commissions or the national commission for estimating the damage caused by natural disasters or from other specialized services.

The purpose of estimating damage is to determine the types and the extent of damage, expressed as value indicators: by areas (municipalities and regions), by cause of damage, by type of means and other goods affected as well as by kind of ownership thereof, by activities and by period related to damage arisen.

The results of the estimation are used for defining the measures for improving the situation and for defining the expanse of loss in comparison with GDP.

In answering the questionnaires the municipalities use the Decree on the Methodology for Estimating Damages Caused by Natural Disasters (OJ RS, No. 67/03), which means unified methodological instructions, particularly important in case of great natural disasters such as floods and earthquakes.

Data sources, obligations related to reporting and use of data are determined by law and international agreements.

It is important to emphasise that municipalities don't have complete insight into entire damage caused, especially that one concerning individual property and some other goods.

As a consequence, some data have also been taken over from other available administrative sources.

From 2001 on the data on hail, flood, thunderstorm, drought and earthquake have been taken over from the Ministry of Defence, Administration of the Republic of Slovenia for Civil Protection and Disaster Relief. The data on fire have been taken over from the same source (Annual Report, Natural and Other Disasters). The data on estimated damage in agriculture caused by different pests (*erwinia amylovora*; viruses and phytoplasma; *ceritcillium spp.*) have been taken over from the Phytosanitary Inspection Service. The data on damage caused by different pests were practically refund damages.

Ultimate damage caused by natural disasters in 2005 was estimated at SIT 18,797 million, which is 4.5% more than in 2004. The share of total damage in comparison to GDP amounted to 0.3%, which was the same as in the previous year.

Observed by fields of activities, the greatest damage was registered in agriculture, hunting and forestry and in transport, storage and communications. Material damage in agriculture was estimated at SIT 10,143 million, which makes 54% of the total amount of estimated damage



Sloveniji. V primerjavi z letom 2004 je bila ocenjena škoda v kmetijstvu večja za 36,5 %. Vrednostni deleži ocenjene škode po posameznih vzrokih nesreč, ki so se vrstili v obdobju 2000–2005, so prikazani na sliki 11.

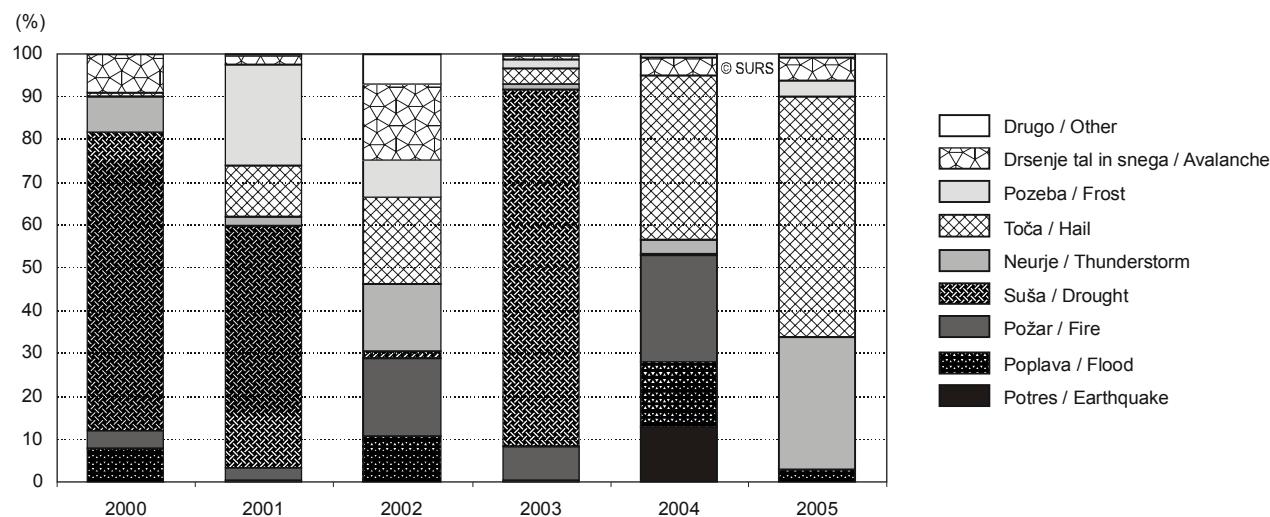
V letu 2005 sta največ škode povzročila toča in neurje. Končna vrednost škode zaradi toče je bila v letu 2005 ocenjena na 10 441 mio. SIT (56 %), v letu 2004 pa na 6 962 mio. SIT (38,7 %). Končna vrednost škode zaradi neurja pa je bila v letu 2005 ocenjena na 907 mio. SIT (31 %), v letu 2004 pa na 616 mio. SIT (3,4 %).

caused by natural disasters in Slovenia. In comparison with 2004, the amount of estimated damage in agriculture was up by 36.5%. Value shares of estimated damage by cause of natural disasters in 2000–2005 are presented in Chart 11.

The greatest estimated damage in 2005 was caused by hail and thunderstorms. The damage arising from hail was estimated at SIT 10,441 million (56%), while in 2004 the damage was estimated at SIT 6,962 million (38.7%). Estimated damage caused by thunderstorm in 2005 amounted to SIT 5,907 million (31%) and in 2004 only to SIT 616 million (3.4%).

**Slika 11: Vrednostni deleži ocenjene škode po vzroku elementarne nesreče, RS, 2000-2005**

Chart 11: Value share of estimated damage by reason for the natural disaster, RS, 2000-2005



V letu 2005 so elementarne nesreče povzročile največje izgube na obratnih sredstvih in na gradbenih objektih; prva v celoti sodijo med zasebno lastnino, slednji pa le z 20,8-odstotnim deležem.

Med statističnimi regijami so elementarne nesreče v letu 2005 povzročile največje izgube v spodnjeposavski in podravski regiji. Toča in neurje – v letu 2005 prevladujoči naravní nesreči – sta največ škode povzročila v spodnjeposavski in savinjski regiji.

Škoda, ki so jo povzročile elementarne nesreče, je bila ocenjena v 103 občinah od 193-ih; v preostalih 90 občinah se ta škoda ni ocenjevala, ker jih elementarne nesreče niso doletele.

With regard to type of material goods affected, the greatest losses in 2005 were registered on working means and buildings, of which the former belong to private ownership entirely and the latter only with a 20.8% share.

Among statistical regions, the greatest losses caused by natural disasters in 2005 were in Spodnjeposavska and Podravska regions. The greatest estimated damage caused by predominant natural disasters – hail and thunderstorm – was in Spodnjeposavska and Savinjska regions.

The damage caused by natural disasters was estimated in 103 municipalities out of 193; the remaining 90 municipalities did not report any damage.

## IZDATKI ZA VARSTVO OKOLJA

Za boljše razumevanje in prikaz okoljskih problemov potrebujemo nekaj posebnih ekonomskeih kazalnikov. Med temi so gotovo zelo pomembni podatki o izdatkih za varstvo okolja. Okoljski izdatki so – kot odgovor na pritiske in stanje okolja – so kazalniki, ki kažejo na pripravljenost za ohranjanje kakovosti okolja; sem sodi izogibanje, preprečevanje, odstranjevanje in zmanjševanje škodljivih vplivov na okolje.

Vir podatkov o izdatkih za varstvo okolja sta dve statistični raziskovanji, dopolnjeni s podatki iz administrativnih virov; s prvim pridobimo podatke o izdatkih za varstvo okolja (vprašalnik OKI), z drugim pa podatke o izdatkih za varstvo okolja pri izvajalcih služb za varstvo okolja (vprašalnik OKI – S).

## ENVIRONMENTAL EXPENDITURE

For better understanding and presenting the environmental problems some special economic indices are required. Among them data on expenditure for the environmental protection are very important. Environmental protection expenditure are the response on the pressure and state of the environment, they show the preparedness for preserving the quality of environment whereas the avoiding, preventing, removing and reducing the harmful impacts to the environment are included.

The source of data on environment expenditures are data from two statistical surveys completed with data from administrative sources. The first statistical survey is the survey on gross fixed capital formation and current expenditure for environmental protection (OKI questionnaire) and the second one is the survey on gross fixed capital formation and current expenditure for environmental protection with the units performing environmental protection activities (OKI – S questionnaire)

Izdatke za varstvo okolja, zbrane s statističnim raziskovanjem, sestavljajo investicije za varstvo okolja in tekoči izdatki za varstvo okolja. Podatke zbiramo tudi po okoljskih namenih (varstvo zraka, upravljanje odpadnih vod, ravnanje z odpadki, varstvo in izboljšava tal in podtalnice, varstvo pred hrupom in vibracijami, varstvo biološke raznovrstnosti in pokrajine, raziskave in razvoj in drugi okoljski nameni, kamor pristevarimo tudi varstvo pred radioaktivnostjo).

Investicije za varstvo okolja delimo po namenu in delovanju na zaščito okolja na investicije za varstvo okolja na koncu proizvodnega postopka in investicije za varstvo okolja med proizvodnim postopkom.

**Investicije na koncu proizvodnega postopka** so investicije (vlaganja) v nove načine, tehnologije postopke ali opremo za zbiranje in odstranjevanje onesnaženosti ali onesnaževal (npr. emisij v zrak, izcednih voda pri odlaganju odpadkov). Te investicije so namenjene tudi za ravnanje z onesnaževali in z njihovo odlaganje ter za redno opazovanje in meritve stopnje onesnaženosti (predvsem na koncu proizvodnega postopka – na iztoku ali izhodu – kot npr. emisijski filtri, naprave za čiščenje odpadnih vod, zbiranje odpadkov in ravnanje z njimi).

Slika 12 prikazuje podatke o investicijah za varstvo okolja na koncu proizvodnega postopka v predelovalnih dejavnostih v letih od 2001 do 2004, zbrane s statističnim raziskovanjem.

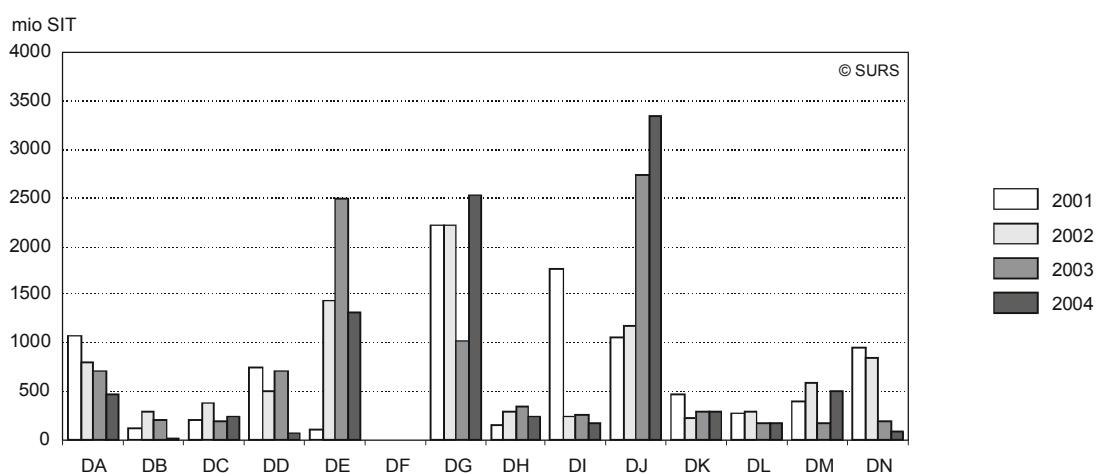
Environmental protection expenditures collected with the statistical survey are the sum of gross fixed capital formation for environmental protection and current expenditure for environmental protection. We collect data also by environmental domain (protection of air and climate, wastewater management, waste management, protection and remediation of soil, groundwater and surface water, protection against noise and vibrations, protection of biodiversity and landscape, expenditure for the environment related research and development and other expenditure, where protection against radiation is included).

Gross fixed capital formation for environmental protection is distinguished by the purpose and nature to the end-of-pipe investment and in investment in integrated technologies.

**End-of-pipe investments** are the investments that cover investments for the new methods, practices, technologies, processes or equipment designed to collect and remove the pollution and pollutants after their creation. They are intended also to treat and dispose the pollutants and to monitor and measure the level of pollution (mainly end-of-pipe methods, techniques or equipment, e.g. air emissions filters, wastewater treatment plants, waste collection and treatment activities).

Chart 12 shows data on end-of-pipe investment in manufacturing for 2001-2004 collected with the statistical survey.

**Slika 12: Investicije za varstvo okolja na koncu proizvodnega procesa v predelovalnih dejavnostih, Slovenija, 2001-2004**  
Chart 12: End-of-pipe investment in manufacturing, Slovenia, 2001-2004



DA Pro. hrane, pijač, tobačnih izd.

DB Pro. tekstilij; tekstilnih, krvnenih izd.

DC Pro. usnja, usnjene izd.

DD Obdelava in predelava lesa

DE Pro. vlaknin, papirja; založništvo, tiskar.

DF Pro. koksa, naftnih deriv., jedrskega goriva

DG Pro. kemikalij, kemičnih izd., umetnih vl.

DH Pro. izd. iz gume in plastičnih mas

DI Pro. dr. nekovinskih mineralnih izd.

DJ Pro. kovin in kovinskih izd.

DK Pro. strojev in naprav

DL Pro. električne, optične opreme

DM Pro. vozil in plovil

DN Pro. pohištva, dr. pred. dej., reciklaža

DA Mfr. of food; beverages and tobacco

DB Mfr. of textiles and textile products

DC Mfr. of leather and leather products

DD Manufacture of wood and wood products

DE Mfr. of paper; publishing and printing

DF Mfr. of coke, petroleum prods.&nuc. fuel

DG Mfr. of chemicals, prod.&man-made fibres

DH Mfr. of rubber and plastic products

DI Mfr. of other non-metal.mineral products

DJ Mfr. of basic metals& fabricated products

DK Mfr. of machinery and equipment nec.

DL Mfr. of electrical and optical equipment

DM Manufacture of transport equipment

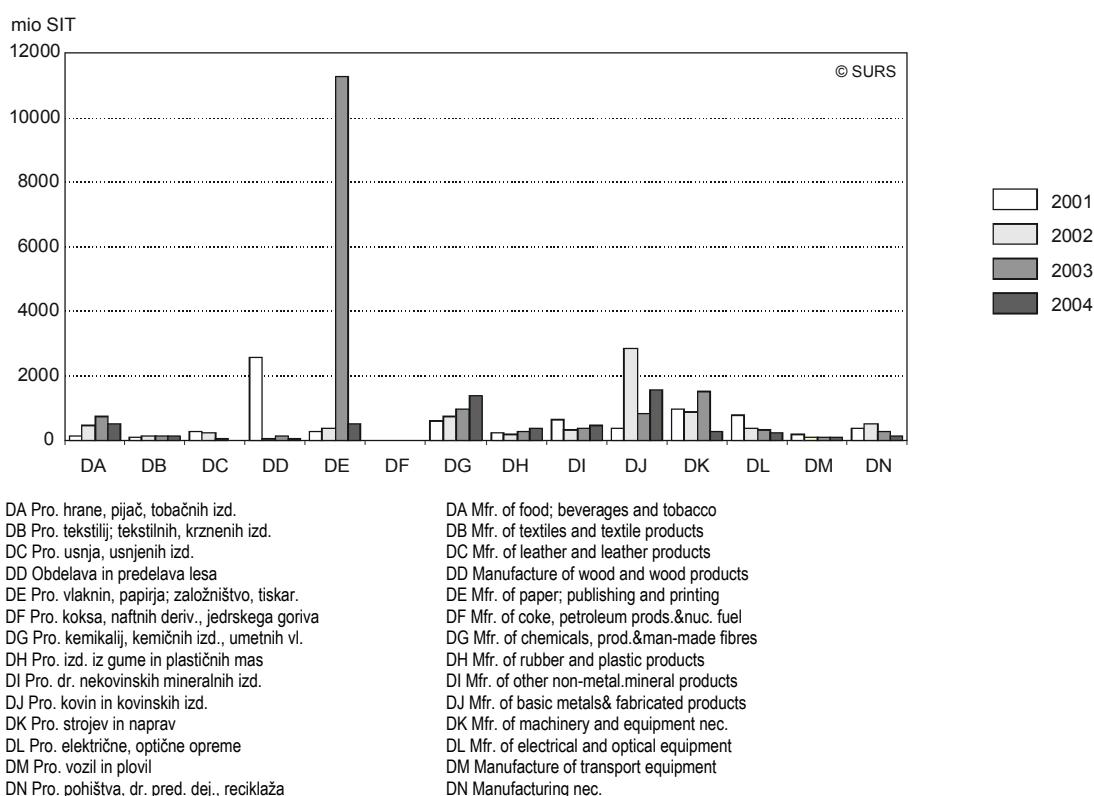
DN Manufacturing nec.

**Investicije med proizvodnim postopkom** so vlaganja v nove tehnologije ali izboljšave starih tehnologij, postopkov ali opreme, s katerimi se preprečujejo ali zmanjšujejo količine onesnaženosti, povzročene med proizvodnim postopkom, in z njimi povezanih izpustov onesnaževal (zmanjševanje vpliva na okolje).

Preprečevanje onesnaževanja lahko zajema različne ukrepe, npr. prilagoditev opreme ali tehnologije, izbiro nove, izboljšane metodologije, spremembo proizvodov, zamenjavo surovin za čistejše proizvode in/ali spremembe v okoljskem upravljanju.

Slika 13 prikazuje obseg investicij za varstvo okolja med proizvodnim postopkom v predelovalnih dejavnostih v letih od 2001 do 2004.

**Slika 13: Investicije za varstvo okolja med proizvodnim procesom v predelovalnih dejavnostih, Slovenija, 2001-2004**  
Chart 13: Investment in integrated technologies, Slovenia, 2001-2004



**Tekoči izdatki za varstvo okolja** se delijo na tekoče izdatke, ki nastanejo v zvezi z varstvom okolja v poročevalski enoti, in na tekoče izdatke za varstvo okolja, ki jih poročevalska enota plačuje drugim za storitve v zvezi z varovanjem okolja. Izdatki za zdravje in varstvo pri delu se ne upoštevajo.

**Tekoči izdatki, ki nastanejo v organiziji,** so namenjeni za delovanje in vzdrževanje naprav, ki zmanjšujejo obremenjevanje okolja (porabo materiala, energije), za izdatke za zaposlene, ki so udeleženi pri aktivnostih v zvezi z varstvom okolja, in za izdatke za upravljanje, obveščanje, izobraževanje in druge izdatke v zvezi z varstvom okolja.

**Tekoči izdatki, plačani drugim,** so namenjeni za plačilo javnemu sektorju ali specializiranim izvajalcem, javnim ali zasebnim (npr. za storitve v zvezi z zbiranjem odpadkov, s čiščenjem odpadnih vod), za plačilo monitoringov, ki jih izvajajo zunanje pooblaščene institucije, in za druge tekoče izdatke (npr. izdatki za pridobivanje okoljskih certifikatov).

**Investments in integrated technologies** are investments that cover investments for new or adaptation of existing methods, practices, technologies, processes or equipment designed to prevent or reduce the amount of pollution created at the source, thereby reducing the environmental impacts associated with the release of pollutants and/or polluting activities (reducing the impact to the environment). Pollution prevention can comprise different measures such as adaptation of equipment and technology, changes in production with the new improved technology, change of raw materials for cleaner products and/or changes in environmental management.

Chart 13 shows data on investments in integrated technologies in manufacturing for 2001-2004 collected with the statistical survey.

**Current expenditure for environmental protection** is divided into internal current expenditure (originating with the reporting unit) and external current expenditure (environmental protection services paid to others). Expenditures for health and safety at work are excluded.

**Internal current expenditure** is intended for operation and maintenance of environmental protection facilities (use of material, energy), personnel costs and other internal current expenditure such as managing, informing, educating and other.

**External current expenditure** is intended for payments to the third parties for environmental protection services (waste collection, cleaning of waste water), monitorings by authorised institutions and other current expenditures such as the (such as expenditure for gaining the environmental certificate).



## 1. Zagotovljene količine vode, načrpane v javnem vodovodu, po vodnih virih po porečjih, Slovenija, 2005

Annual volume of water supplied from public water supply by water sources and by sub-basins, Slovenia, 2005

1000 m<sup>3</sup>

	Skupaj Total	Podzemna voda Ground water	Izviri podzemne vode Springs of ground water	Izviri podzemne vode s površinskim dotokom Springs of ground water with surface water affluence	Tekoče vode Running water	Naravna jezera Natural lakes	Umetni zbiralniki vode Artificial lakes	Umetne bogative Artificial recharge
<b>SLOVENIJA / SLOVENIA</b>	<b>163 460</b>	<b>93 241</b>	<b>56 156</b>	<b>9 744</b>	<b>3 271</b>	-	-	<b>1 048</b>
Povodje Donave	139 339	90 011	42 782	2 227	3 271	-	-	1 048
Donava basin								
Porečje Save								
Sava sub-basin	102 184	61 620	35 276	2 065	3 213	-	-	10
Zgornja Sava	10 748	3 060	7 179	499	-	-	-	10
Sora	3 778	1 076	2 459	243	-	-	-	-
Ljubljanska Sava	41 841	38 856	2 607	328	50	-	-	-
Ljubljanica	7 624	4 925	1 826	86	787	-	-	-
Litija Sava	3 928	412	2 762	754	-	-	-	-
Savinja	16 717	2 672	11 514	155	2 376	-	-	-
Krška Sava	4 743	3 514	1 229	0	-	-	-	-
Krka	10 036	6 931	3 105	0	-	-	-	-
Spodnja Sava	2 769	174	2 595	-	-	-	-	-
Porečje Kolpe	2 310	87	2 129	36	58	-	-	-
Kolpa sub-basin								
Kolpa	2 310	87	2 129	36	58	-	-	-
Porečje Drave	27 536	21 121	5 377	-	-	-	-	1 038
Drava sub-basin								
Mejna Drava	-	-	-	-	-	-	-	-
Meža	1 738	175	1 563	-	-	-	-	-
Zgornja Drava	1 694	535	1 159	-	-	-	-	-
Ptujska Drava	16 606	15 965	641	-	-	-	-	-
Dravinja	2 014	...	2 014	-	-	-	-	-
Gradiška Drava	4 330	4 330	-	-	-	-	-	-
Pesnica	-	-	-	-	-	-	-	-
Ormoška Drava	1 154	116	-	-	-	-	-	1 038
Porečje Mure	7 309	7 183	-	126	-	-	-	-
Mura sub-basin								
Spodnja Mura	2 819	2 805	-	14	-	-	-	-
Velika Krka z Ledavo	4 479	4 367	-	112	-	-	-	-
Török	-	-	-	-	-	-	-	-
Zala	11	11	-	-	-	-	-	-
Povodje Jadranskega morja	24 121	3 230	13 374	7 517	-	-	-	-
Adriatic Sea river basin								
Porečje obale	11 006	2 422	1 370	7 214	-	-	-	-
The coast sub-basin								
Slovenska obala	6 961	-	-	6 961	-	-	-	-
Timav	4 045	2 422	1 370	253	-	-	-	-
Slovenska Istra	-	-	-	-	-	-	-	-
Porečje Soče	13 115	808	12 004	303	-	-	-	-
Soča sub-basin								
Zgornja Soča	977	90	887	-	-	-	-	-
Idrijca	1 278	19	989	270	-	-	-	-
Srednja Soča	8 277	695	7 549	33	-	-	-	-
Vipava	2 546	4	2 542	-	-	-	-	-
Nadiža	28	-	28	-	-	-	-	-
Idrija	9	-	9	-	-	-	-	-

**2. Količine vode, dobavljene iz javnega vodovoda, po statističnih regijah, Slovenija, 2005**

Amount of water supplied from public water supply by statistical regions, Slovenia, 2005

1000 m<sup>3</sup>

	Skupaj Total	Voda, dobavljena gospodinjstvom Water supplied to households	Voda, dobavljena dejavnostim Water supplied to activities	Dobavljena, a neobračunana voda Supplied but uncharged water	Izguba Water loss within waterworks network
<b>SLOVENIJA/SLOVENIA</b>	<b>165 219</b>	<b>84 778</b>	<b>34 508</b>	<b>3 293</b>	<b>42 640</b>
Pomurska	6 463	3 258	2 094	0	1 111
Podravska	22 608	12 077	4 577	488	5 466
Koroška	3 445	2 225	635	0	585
Savinjska	21 000	10 466	6 088	869	3 577
Zasavska	3 030	1 614	703	31	682
Spodnjeposavska	4 221	2 648	561	194	818
Jugovzhodna Slovenija	10 646	5 421	2 218	398	2 609
Osrednjeslovenska	49 880	25 672	7 666	565	15 977
Gorenjska	15 347	9 990	3 803	104	1 450
Notranjsko-kraška	4 740	1 808	930	261	1 741
Goriška	13 115	5 015	2 735	99	5 266
Obalno-kraška	10 724	4 584	2 498	284	3 358

**3. Odpadne vode po mestu izpusta, Slovenija, letno**

Waste water by place of discharge, Slovenia, yearly

1000 m<sup>3</sup>

	2005	2004	2003
<b>Mesto izpusta - skupaj</b>	<b>143299</b>	<b>128144</b>	<b>125421</b>
<b>Place of discharge - total</b>			
<b>Neprečiščene odpadne vode - skupaj</b>	<b>66019</b>	<b>33313</b>	<b>40625</b>
<b>Untreated waste water - total</b>			
Neprečiščene odpadne vode v podtalnice	3827	4048	3886
Untreated waste water discharged into ground water			
Neprečiščene odpadne vode v površinske vode	62192	29265	36739
Untreated waste water discharged into surface water			
neprečiščene odpadne vode, od tega v vodotoke	60763	27495	35670
of which untreated waste water discharged into watercourses			
<b>Prečiščene odpadne vode - skupaj</b>	<b>77280</b>	<b>94831</b>	<b>84796</b>
<b>Treated waste water - total</b>			
Prečiščene odpadne vode v podtalnice	455	956	2062
Treated waste water discharged into ground water			
Prečiščene odpadne vode v površinske vode	76825	93875	82734
Treated waste water discharged into surface water			
prečiščene odpadne vode, od tega v vodotoke	61483	80112	68795
of which treated waste water discharged into watercourses			

**4. Preskrba poslovnih subjektov z vodo po področjih dejavnosti in vrsti oskrbe, Slovenija, 2005**

Water supply of business entities by sections of activities and type supply, Slovenia, 2005

1000 m<sup>3</sup>

	Vrsta oskrbe - SKUPAJ Type of water supply - TOTAL	Lastno zajetje - podzemna voda Self supply - ground water	Lastno zajetje - tekoče vode Self supply - running water	Lastno zajetje - drugi viri Self supply - other sources	Javni vodovodni sistem Public water supply
<b>Področja dejavnosti (C, D, E) - SKUPAJ</b>	<b>73902225</b>	<b>28421</b>	<b>61138411</b>	<b>12722139</b>	<b>13224</b>
Sections of activities (C, D, E) - TOTAL					
C Rudarstvo	1220	511	308	-	401
C Mining and quarrying					
D Predelovalne dejavnosti	84370	25102	46824	5	12439
D Manufacturing					
E Oskrba z električno energijo, plinom in vodo	73816635	2808	61091309	12722134	384
E Electricity, gas and water supply					



**5. Količine in vrste zbranih komunalnih odpadkov po statističnih regijah, Slovenija, 2005**

Quantities and type of municipal waste collected by statistical regions, Slovenia, 2005

1000 t

	Zbrani komunalni odpadki – skupaj Collected municipal waste - total	Ločeno zbrani komunalni odpadki Separately collected municipal waste	Odpadki iz vrtov in parkov Waste from gardens and parks	Drugi komunalni odpadki Other municipal waste	Odpadna embalaža Packaging waste
<b>Slovenija/Slovenia - skupaj/total<sup>1)</sup></b>	<b>797,7</b>	<b>46,7</b>	<b>22,2</b>	<b>704</b>	<b>24,8</b>
Pomurska	31,9	1	0,4	30	0,5
Podravska	131,7	14,5	1,8	109,6	5,8
Koroška	26,6	1,1	0,8	24,1	0,6
Savinjska	100,8	3,6	1,6	93,4	2,2
Zasavska	15,8	0,7	0,1	14,3	0,7
Spodnjeposavska	26,1	1,9	1,1	22,6	0,5
Jugovzhodna Slovenija	42,4	1,7	1	38,8	0,9
Osrednjeslovenska	212,1	10,1	9,1	186,5	6,4
Gorenjska	81	4	2	72,2	2,8
Notranjsko-kraška	21,6	0,7	0,9	19,5	0,5
Goriška	55,9	4,6	1,1	47,7	2,5
Obalno-kraška	51,7	2,8	2,2	45,3	1,4

1) Zaradi zaokroževanja se seštevki ne ujemajo. / The figures are rounded, so the sums do not always add up.

**6. Odpadki, nastali v proizvodnih in storitvenih dejavnostih, po statističnih regijah, Slovenija, 2005**

Industrial waste generated, by statistical regions, Slovenia, 2005

1000 t

	Nastali odpadki iz proizvodnih in storitvenih dejavnosti Industrial waste generated		
	skupaj <sup>1)</sup> total <sup>1)</sup>	od tega:	
		nenevarni odpadki non-hazardous	nevarni odpadki hazardous
<b>Slovenija/Slovenia - skupaj/total<sup>1)</sup></b>	<b>5669,1</b>	<b>5542,3</b>	<b>126,8</b>
Pomurska	264,8	252,3	12,5
Podravska	416,4	366,1	50,3
Koroška	146,7	142,9	3,9
Savinjska	2316,4	2312,2	4,2
Zasavska	223	222,9	0,2
Spodnjeposavska	163,6	163,2	0,4
Jugovzhodna Slovenija	299	295	4
Osrednjeslovenska	1014,1	982	32
Gorenjska	405,6	395,7	9,9
Notranjsko-kraška	131,6	130,4	1,1
Goriška	107,2	105,3	1,8
Obalno-kraška	180,6	174,2	6,5

1) Zaradi zaokroževanja se seštevki ne ujemajo. / The figures are rounded, so the sums do not always add up.

**7. Ocenjena škoda po vrstah elementarnih nesreč, Slovenija, 2003-2005**

Estimated damage by types of natural disasters, Slovenia, 2003-2005

mio SIT

	2003	2004	2005	TOTAL
<b>SKUPAJ</b>	<b>36937</b>	<b>17985</b>	<b>18797</b>	
Potres	-	2341	-	Earthquake
Poplava	86	2727	531	Flood
Požar	3005	4402	72	Fire
Suša	30766	72	-	Drought
Neurje (močan veter)	443	616	5907	Thunderstorm
Toča	1418	6962	10441	Hail
Pozeba	700	-	676	Frost
Žled	-	-	-	Freezing rain
Drsenje tal in snega (plaz, usad)	334	743	956	Avalanche (land-slip, snow-slip)
Epizootija (živalske bolezni)	1	-	-	Epizootic (epidemic animal infectious diseases)
Škoda zaradi različnih škodljivcev in bolezni	61	9	171	Damage caused by different pests and diseases
Ekološke nesreče (emisija plinov ipd.)	35	93	41	Pollution accidents (gas emissions and similar)
Drugo	88	20	1	Other

Podatke o suši, pozebi, neurjih s točo, potresu in o požaru smo prevzeli od Ministrstva RS za obrambo, Uprave RS za zaščito in reševanje (URSZR); podatke o škodi zaradi različnih škodljivcev in bolezni (hrušev ozig) smo prevzeli od Fitosanitarne Uprave RS.

Data on drought, frost, hailstorms, earthquake and fire were taken over from the Ministry of Defence, Administration for Civil Protection and Disaster Relief, while data on damage caused by pests and diseases (*Erwinia amylovora*) were taken over from the Phytosanitary Administration of the Republic of Slovenia.STATISTIČNI URAD REPUBLIKE SLOVENIJE  
STATISTICAL OFFICE OF THE REPUBLIC OF SLOVENIA

## 8. Investicije za varstvo okolja po statističnih regijah, Slovenija, 2004<sup>1)</sup>

Gross fixed capital formation for environmental protection by statistical regions, Slovenia, 2004<sup>1)</sup>

mio SIT

	Skupaj Total	Varstvo zraka in klime Protection of ambient air and climate	Upravljanje odpadnih voda Wastewater management	Ravnanje z odpadki Waste management	Varstvo in izboljšava tal, podtalnice in površinskih voda Protection and remediation of soil, groundwater and surface water	Varstvo pred hrupom in vibracijami Noise and vibration abatement	Varstvo biološke raznovrstnosti in pokrajine Protection of biodiversity and landscape	Drugo Other
<b>SLOVENIJA / SLOVENIA</b>	<b>45965</b>	<b>11389</b>	<b>16797</b>	<b>8795</b>	<b>4091</b>	<b>3450</b>	<b>1003</b>	<b>442</b>
Pomurska	1299	359	384	236	23	-	292	5
Podravska	5150	670	1907	2249	227	32	-	65
Koroška	733	408	166	107	37	0	-	14
Savinjska	11286	2164	2390	1400	2687	2251	303	90
Zasavska	2427	2015	162	94	-	1	153	1
Spodnjeposavska	1292	1	1146	136	-	6	3	-
Jugovzhodna Slovenija	2059	24	1700	282	11	41	-	1
Osrednjeslovenska	12596	3592	5130	2787	557	171	195	164
Gorenjska	3465	427	1283	736	473	468	36	41
Notranjsko-kraška	446	30	182	54	21	154	-	4
Goriška	3118	1259	1142	347	42	277	21	31
Obalno-kraška	2096	439	1203	367	13	49	-	25

Prikazani so podatki, zbrani z raziskovanjem OKI in OKI - S.

Data collected with OKI and OKI-S surveys are shown.

1) Zaradi zaokroževanja se seštevki ne ujemajo. / The figures are rounded, so the sums do not always add up.

## 9. Tekoči izdatki za varstvo okolja po statističnih regijah, Slovenija, 2004<sup>1)</sup>

Current expenditure for environmental protection by statistical regions, Slovenia, 2004<sup>1)</sup>

mio SIT

	Skupaj Total	Varstvo zraka in klime Protection of ambient air and climate	Upravljanje odpadnih voda Wastewater management	Ravnanje z odpadki Waste management	Varstvo in izboljšava tal, podtalnice in površinskih voda Protection and remediation of soil, groundwater and surface water	Varstvo pred hrupom in vibracijami Noise and vibration abatement	Varstvo biološke raznovrstnosti in pokrajine Protection of biodiversity and landscape	Raziskave in razvoj Research and development	Drugo Other
<b>SLOVENIJA / SLOVENIA</b>	<b>61491</b>	<b>4966</b>	<b>14006</b>	<b>35429</b>	<b>1277</b>	<b>539</b>	<b>765</b>	<b>646</b>	<b>3861</b>
Pomurska	1600	36	351	1024	81	1	0	52	54
Podravska	17533	506	3567	12581	196	16	15	78	574
Koroška	2377	177	97	1617	10	4	0	6	466
Savinjska	10241	2456	2718	4445	139	37	48	279	120
Zasavska	636	80	58	90	3	0	381	6	18
Spodnjeposavska	2847	58	415	814	4	18	0	0	1538
Jugovzhodna Slovenija	2982	143	877	1649	27	10	1	29	248
Osrednjeslovenska	14150	789	3784	7587	654	418	228	100	589
Gorenjska	4115	412	984	2558	37	7	4	18	95
Notranjsko-kraška	644	104	160	234	108	4	0	9	24
Goriška	2239	121	391	1570	7	17	83	2	48
Obalno-kraška	2127	85	604	1259	12	7	6	67	88

Prikazani so podatki, zbrani z raziskovanjem OKI in OKI - S.

Data collected with OKI and OKI-S surveys are shown.

1) Zaradi zaokroževanja se seštevki ne ujemajo. / The figures are rounded, so the sums do not always add up.



**STATISTIČNA ZNAMENJA**

- ni pojava
- ... ni podatka
- $\emptyset$  povprečje
- 0 podatek je manjši od 0,5 dane merske enote
- 0,0 podatek je manjši od 0,05 dane merske enote
- + in več (let, članov,...)
- 1) označba za opombo pod tabelo
- ( ) nezadostno preverjen ali ocenjen podatek
- z podatek zaradi zaupnosti ni objavljen

**STATISTICAL SIGNS**

- no occurrence of event
- ... data not available
- $\emptyset$  average
- 0 value not zero but less than 0,5 of the unit employed
- 0,0 value not zero but less than 0,05 of the unit employed
- + and more (years, members,...)
- 1) footnote
- ( ) incomplete or estimated data
- z data not published because of confidentiality

**METODOLOŠKA POJASNILA****VODE****Viri in metode zbiranja podatkov**

Podatke o vodnem gospodarstvu zbiramo z letnimi statističnimi vprašalniki, ki nam jih pošiljajo podjetja in organizacije iz področij predelovalne dejavnosti, rudarstvo, kmetijstvo in ribištvo, gozdarstvo, vodno gospodarstvo, komunalne dejavnosti in krajevne skupnosti, ki upravljajo javni vodovod in javno kanalizacijo.

Osnova za vse podatke so meritve z vodom, ki so nameščeni na vodnih virih in proizvodnih napravah. Kjer vodomerov ni, so količine zajete vode ocenjene na podlagi normativov za določeno dejavnost, in sicer na osnovi glavnega projekta, obratovalnega časa in zmogljivosti črpalk ali na podlagi strokovne ocene.

Podatke o namakanju nam sporočajo upravljavci namakalnih sistemov. Seznam upravljavcev namakalnih sistemov se dopolnjuje s podatki Ministrstva za kmetijstvo, gozdarstvo in prehrano.

Podatke o kakovosti vode v slovenskih rekah ter o urejanju vodotokov in varovanju pred poplavami površinskih voda dobimo od Ministrstva za okolje, prostor in energijo - Agencije RS za okolje.

**Zajetje**

Podatke o izkoriščanju vode nam pošiljajo podjetja in druge organizacije, odgovorne za upravljanje javnih vodovodov in javnih kanalizacij. Javni vodovodni sistem zagotavlja povprečno vsaj  $10 \text{ m}^3$  vode na dan ali oskrbuje vsaj 50 oseb. Javna kanalizacija zajema čistilne naprave z zmogljivostjo več kot 50 PE (populacijskih enot).

Podatke o javnem vodovodu in javni kanalizaciji spremljamo po naseljih in po porečjih.

Podatke o izkoriščanju vode v industriji nam sporočajo vsi poslovni subjekti, ki so po Standardni klasifikaciji dejavnosti (Uradni list RS št.02/2002) razvrščeni v področje dejavnosti rudarstvo, predelovalne dejavnosti in oskrba z elektriko, plinom in vodo in ki letno porabijo vsaj  $10.000 \text{ m}^3$  vode.

Seznam upravljavcev namakalnih sistemov smo leta 2004 dopolnili še s podatki Ministrstva za kmetijstvo, gozdarstvo in prehrano.

**Definicije in pojasnila**

**Vodni vir** je vir vode, iz katerega se zajema voda za preskrbo prebivalstva ali za tehnološki postopek in hlajenje v podjetjih:

- **podzemna voda izdatnejših vodonosnikov:** črpališča na vodonosnikih z medzrnsko poroznostjo, studenci/vodnjaki, črpališča podzemne vode vodonosnikov z razpoklinsko poroznostjo, kraško/rzapoklinsko poroznostjo ali mešano poroznostjo;

**METHODOLOGICAL EXPLANATIONS****WATERS****Sources and methods of data collection**

Data on water management are collected from the annual reports forwarded by enterprises and organizations from the fields of manufacturing, mining and electricity supply, agriculture and fishing, forestry and hunting, water management, community service activities, and from local communities which manage public waterworks and sewage.

All data are entered on the basis of measurements made with water gauges placed in water resources and production installations. If there is no water gauge, the quantities of collected water are estimated on the basis of the norms for a given branch of activity, main project, operating times and pumping station capacity, or on the basis of an expert estimate.

Data on irrigation are reported by managers of irrigation systems. The list of irrigation system managers is updated with data from the Ministry of Agriculture, Forestry and Food.

**Coverage**

Data on water exploitation are sent by enterprises and other organisations responsible for managing public waterworks and public sewage systems. The public water supply network provides at least  $10 \text{ m}^3$  of water per day or supplies at least 50 people. The public sewage system covers waste water treatment plants with the capacity of at least 50 population units.

Data on public waterworks and public sewage systems are monitored by settlements and river basins.

Data on water exploitation are sent also by enterprises from the fields of manufacturing, mining and electricity supply that exceed the limit of  $10.000 \text{ m}^3/\text{year}$  of water used.

In 2004 we completed the list of managers of irrigation systems with data of the Ministry of Agriculture, Forestry and Food.

**Definitions and explanations**

A **water resource** is a source of water that is collected for public water supply or for the technological process and cooling in enterprises:

- **groundwater of larger aquifers:** pumping stations at aquifers with granular porosity, springs/wells, groundwater pumping stations of aquifers with fissure porosity, carst/fissure porosity or mixed porosity



- **izviri podzemne vode**, ki ne zajemajo hkrati tudi površinskega dotoka: kraški izviri, izviri na stikih bolj propustnih s slabo propustnimi ali nepropustnimi plastmi, studenci z gravitacijskim dotokom vode;
- **izviri podzemne vode s površinskim dotokom**: izviri podzemne vode, v katere priteka še površinska voda;
- **tekoče vode**: reke, potoki;
- **naravna jezera**;
- **umetni zbiralniki vode**: akumulacije, ribniki, zalite gramoznice, kali;
- **meteorne vode**: kapnica ali drugače zajeta padavinska voda;
- **umetne bogatitve**: zajem podtalne vode, ki jo umetno bogatimo s površinsko vodo (drenaže rečne vode, bazeni za bogatenje).

**Povodje** je območje, s katerega vse celinske vode odtekajo (preko potokov, rek ali jezer) v isto reko, ki se izliva v morje.

**Porečje** je območje, s katerega vse celinske vode odtekajo (preko potokov, rek ali jezer) v isto reko ali jezero.

**Priključek** na vodovodno omrežje je fizični priključek porabnika na sekundarno vodovodno omrežje (in ne morda število stanovanj ali število prebivalcev, priključenih na vodovodno omrežje).

**Sveža voda** je voda, ki je prevzeta iz virov v naravnem stanju ali pa je pred uporabo obdelana (koagulacija, filtracija, dezinfekcija).

**Tehnološka voda** je voda, ki se uporablja v proizvodnji in drugod in ne ustreza dogovorjenim merilom o higieni neoporečnosti vode.

**Pitna voda** je voda, ki po mikrobioloških, fizikalnih, kemičnih in radioloških lastnostih ter po vsebnosti pesticidov in bojnihstrupov ustreza merilom, predpisanim v pravilniku o higieni neoporečnosti vode. Higienično neoporečna voda se uporablja za javno preskrbo prebivalstva in za proizvodnjo živil, namenjenih prodaji.

**Uporabljena voda** zajema svežo vodo, vodo v recirkulaciji in vnovič uporabljeno vodo.

**Porabljena voda** je tista količina vode, ki se izgubi z uparjanjem ali ki postane del proizvoda in torej ni več na voljo.

**Voda v recirkulaciji** je letna količina vode v cirkulacijskem sistemu.

**Neonesnažena voda** je voda, ki je primerna za vsakršno uporabo brez kakršne koli obdelave in ki med uporabo ne spremeni svojih prvotnih lastnosti.

**Odpadna (onesnažena) voda** je vsa izpuščena uporabljena voda, katere fizikalne, kemične in biološke lastnosti ne dosegajo standardov drugega kakovostnega razreda.

**Kanalizacija** je omrežje zaprtih kanalov za odvajanje odpadov in padavinskih vod od priključkov v naselju do izliva v odprte vode, zemljo ali čistilne naprave.

**Primarno čiščenje** je čiščenje komunalne odpadne vode s fizikalnim in/ali kemičnim postopkom, s katerim se doseže posedanje trdnih delcev, ali drug postopek, pri katerem se BPK<sub>5</sub> surove odpadne vode pred izpustom zmanjša vsaj za 20 %, vsebnost neraztopljenih snovi v surovi odpadni vodi pa se zmanjša vsaj za 50 %.

**Sekundarno čiščenje** je čiščenje komunalne odpadne vode po postopku, ki večinoma zajema biološko čiščenje s sekundarnim posedanjem, ali drug postopek, v katerem se biokemijska potreba po kisiku zmanjša za 70–90 %, kemijska potreba po kisiku se zmanjša za 75 %, količina neraztopljenih snovi pa se zmanjša za 90 %.

- **springs of groundwater** that do not include a surface water inflow: karst sources, sources at contacts of more permeable and less permeable or non-permeable layers, and springs with a gravitational water inflow
- **springs of groundwater with surface water inflow**: springs of groundwater into which surface water flows
- **running waters**: rivers, streams
- **natural lakes**
- **artificial lakes**: reservoirs, ponds, submerged gravel pits, puddles
- **run-off rain water**: rainwater and other run-off rain water
- **artificial recharge**: drawing of groundwater that is artificially recharged with surface water (drainage river water, pools for recharge)

A **river basin** is the area of land from which all surface run-off flows through a series of streams, rivers and, possibly, lakes into the sea at a single river mouth, estuary or delta.

A **sub-basin** is the area of land from which all surface run-off flows through a series of streams, rivers and, possibly, lakes into a particular point in a watercourse (normally a lake or a river confluence).

**Connection** to the water supply network is the physical connection of the user to the secondary water supply network and not the number of dwellings or people connected to the water supply network.

**Fresh water** is drawn from water resources in its natural state or is processed by the usual methods (coagulation, filtration, disinfection).

**Technological water** is used for production and other purposes and does not meet the agreed standards for cleanliness of drinking water.

**Drinking water** must conform to regulations on the cleanliness of water in terms of microbiological, physical, chemical and radiological content, pesticides and military poisons. These regulations prescribe a level of cleanliness of water intended for supply as public drinking water or water for the production of food intended for sale.

**Used water** comprises fresh water, water in circulation and reused water.

**Consumed water** is the quantity of water lost through vaporization or water that becomes part of a product. Such water is no longer available.

**Water in recirculation** is the annual quantity of water turned over in the circulation system.

**Unpolluted water** is suitable for all types of use with no processing whatsoever and is water the properties of which remain unchanged during use.

**Waste (polluted) water** is all released used water whose physical, chemical and biological properties do not confirm to the second class quality standard.

**Sewage system** consists of a network of closed channels for draining waste water and precipitation water from the point of connection in a settlement to the outflow into open water, the ground or a purification plant.

**Primary waste water treatment** is treatment of urban waste water with physical and/or chemical procedures with which solid particles are removed or some other procedures with which the biochemical oxygen demand (BOD)<sub>5</sub> of raw waste water before discharge is reduced by at least 20% and the quantity of suspended solids in raw waste water is reduced by at least 50%.

**Secondary waste water treatment** is treatment of urban waste water with procedures mostly involving biological treatment with secondary filtering of solid particles or some other procedures with which the biological oxygen demand is reduced by 70-90%, chemical oxygen demand by 75% and the quantity of suspended solids by 90%.

**Tertiarno čiščenje** zajema poleg sekundarnega čiščenja še postopek za zmanjšanje celotnega fosforja za 80 % in celotnega dušika za 70–80 %.

**Namakanje** je umetno dodajanje vode v času vegetacije, kadar je v tleh primanjkuje, z namenom, da zagotovimo optimalno rast in razvoj gojenih rastlin. Z namakanjem dosežemo intenzifikacijo kmetijske pridelave, pestrejši izbor sort ter kakovostnejši in obilnejši pridelek. Namakanje obsega ukrepe in naprave za zagotovitev vode, njeno distribucijo in rabo z namenom, da zagotovimo rastlinam optimalno vlago v tleh.

## ODPADKI

### Viri in metode zbiranja podatkov

Od leta 2001 izvaja Statistični urad RS v sodelovanju z Agencijo RS za okolje letno **pet statističnih raziskovanj** s področja odpadkov – tri se nanašajo na **industrijske odpadke** (ODP, ODP-Z in ODP-P), dve pa na **komunalne odpadke** (KO-Z in KO-U). Pri izdelavi metodologije smo upoštevali zahteve slovenske zakonodaje in zahteve nove zakonodaja Evropske unije (Waste Statistics Regulation), hkrati pa smo vključili tudi priporočila Organizacije združenih narodov s področja statistike okolja.

### Zajetje

**Podatke o komunalnih odpadkih** smo pridobili od poslovnih subjektov, ki jim je občina dodelila pravico za izvajanje javne gospodarske službe zbiranja in odvoza komunalnih odpadkov, in sicer z vprašalnikom KO-Z. V to raziskovanje so zajeti le odpadki iz skupin 20 (komunalni odpadki in njim podobni odpadki iz industrije, obrti in storitvenih dejavnosti, vključno z ločeno zbranimi frakcijami) in 15 01 (embalaža, vključno z ločeno zbrano embalažo, ki je komunalni odpadek) Klasifikacijskega seznama odpadkov.

**Podatke o količinah odpadkov, pripeljanih na odlagališča,** smo pridobili od poslovnih subjektov, ki so upravljavci odlagališč nenevarnih odpadkov, na katera se pretežno odlagajo komunalni odpadki (komunalna odlagališča), in sicer z vprašalnikom KO-U.

**Podatke o količini nastalih odpadkov v proizvodnih in storitvenih dejavnostih** smo pridobili od poslovnih subjektov, pri katerih odpadki nastajajo, in sicer z vprašalnikom ODP. V raziskovanje so bili zajeti poslovni subjekti, ki kot svojo primarno dejavnost opravljajo eno izmed dejavnosti iz področij od A do O po Standardni klasifikaciji dejavnosti (SKD) in ki imajo več kot 5 oziroma 10 zaposlenih.

V raziskovanje so bili zajeti tudi poslovni subjekti, ki lastne odpadke interno predelujejo ali odstranjujejo. Poslovni subjekti, ki spadajo v področji dejavnosti B in J, se z interno predelavo/odstranjevanjem odpadkov niso ukvarjali.

**Podatke o količini zbranih odpadkov iz proizvodnih in storitvenih dejavnosti** smo pridobili od poslovnih subjektov, ki so na Ministrstvu za okolje in prostor registrirani kot zbiralci industrijskih odpadkov, in sicer z vprašalnikom ODP-Z.

**Podatke o količini predelanih ali odstranjenih industrijskih odpadkov** smo pridobili od poslovnih subjektov, ki so na Ministrstvu za okolje in prostor registrirani kot predelovalci oziroma odstranjevalci odpadkov, prevzetih od drugih imetnikov odpadkov, in sicer z vprašalnikom ODP-P.

Pri razvrščanju posameznih vrst odpadkov so poročevalske enote uporabljale Klasifikacijski seznam odpadkov (Katalog odpadkov); ta je bil objavljen kot priloga k Pravilniku o ravnanju z odpadki (Uradni list RS, št. 20/01). V tem seznamu so odpadki razvrščeni v skupine predvsem glede na vir nastanka odpadkov.

**Tertiary waste water treatment** covers, in addition to secondary treatment, the procedures for reducing the total quantity of phosphorus by 80% and the total quantity of nitrogen by 70-80%.

**Irrigation** is artificial adding of water during the vegetation period when there is not enough water in the soil with the purpose to provide the optimum growth and development of cultivated plants. By irrigating land agricultural production is intensified, a more varied selection of plant varieties is achieved and output is better and more abundant. Irrigation comprises measures and equipment for providing, distributing and using water with the intent to provide plants with the optimum humidity in the ground.

## WASTE

### Sources and methods of data collection

Since 2001 the Statistical Office together with the Environmental Agency of the Republic of Slovenia has been carrying out annually **five surveys** – three for **industrial waste** (ODP, ODP-Z and ODP-P) and two for **municipal waste** (KO-Z and KO-U). In formulating the methodology we took into account the current legislation of the Republic of Slovenia for the field of waste management and the new Waste Statistics Regulation (legislation of the EU). We also incorporated methodological elements of the United Nations relating to the field of environment statistics.

### Coverage

**Data on public waste removal** were obtained from business entities that were given the license by the municipality to carry out the public service of collecting and removing municipal waste (KO-Z questionnaire). The survey covers only municipal waste from groups 20 (Municipal waste – household waste and similar commercial, industrial and institutional waste, including separately collected fractions) and 15 01 (packaging – including separately collected municipal packaging waste) from the List of Waste.

**Data on landfill sites** were obtained from business entities registered as managers of landfill sites of non-hazardous waste in Slovenia at which municipal waste is mostly disposed (KO-U questionnaire).

**Data on quantities of waste generated in production and service activities** were obtained from business entities that were the waste producers (ODP questionnaire). The survey covers business entities from all fields of activity (A to O by the Standard Classification of Activities) which have more than 5 or 10 employees.

The survey covers also business entities implementing internal waste recovering/reusing or disposing. The internal treatments were not present in the fields of activity B and J.

**Data on quantities of waste collected from production and service activities** were obtained from business entities having the license (obtained from the Ministry of the Environment and Spatial Planning) to collect industrial and hazardous waste (ODP-Z questionnaire).

**Data on quantities of industrial waste recovered or disposed** in Slovenia were obtained from business entities registered at the Ministry of the Environment and Spatial Planning for recovering/reusing and disposing waste collected/received from others (ODP-P questionnaire).

Waste has been classified by the reporting units according to the Waste Catalogue, which is part of the Regulation on Waste Management (OJ RS No 20/01). In this list waste is arranged into groups of waste, first of all with regard to the source of waste generation.



Ta pravilnik ne upošteva radioaktivnih odpadkov, ker ravnanje z njimi urejajo posebni predpisi.

### Definicije in pojasnila

**Odpadek** je vsaka snov ali vsak predmet, razvrščen v eno izmed skupin odpadkov, določenih v Klasifikacijskem seznamu odpadkov, ki ga imetnik ne more ali ne želi uporabiti sam ali ga ne potrebuje ali ki imetnika moti ali mu škodi in ga zato zavrže oz. namerava ali mora zavreči.

Med odpadke ne spadajo snovi, ki se izpuščajo z odpadnimi plini v zrak, in snovi, ki se odvajajo z odpadnimi vodami neposredno v vode ali v kanalizacijo.

**Nevarni odpadki** so odpadki, ki imajo eno ali več nevarnih lastnosti (od H1 do H14).

Med nevarne odpadke štejemo npr. odpadna olja, okside, soli, kisline, luge, koncentrate, odpadke organskih topil, barve, lake, smole, agrokemijske in farmacevtske preparate, specialne odpadke iz bolnišnic ter druge nevarne odpadke organskega in anorganskega izvora.

Nevarni odpadki so po Pravilniku o spremembah in dopolnitvah pravilnika o ravnanju z odpadki (Uradni list RS, št. 20/01) razvrščeni v Klasifikacijski seznam odpadkov po skupinah odpadkov skupaj z drugimi odpadki in so označeni z zvezdico ob klasifikacijski številki odpadka.

**Klasifikacijski seznam odpadkov** je seznam odpadkov, nevarnih in nenevarnih, razvrščenih po ustreznih skupinah predvsem glede na izvor nastanka odpadka. Za vsak odpadek je poleg natančno opredeljenega imena vpisana še ustrezena klasifikacijska številka odpadka.

**Javni odvoz odpadkov** je dejavnost, ki jo v javnem interesu opravljajo pristojne javne službe (komunalna in druga podjetja, ki so za opravljanje te dejavnosti pooblaščena oziroma imajo zanjo dovoljenje ali koncesijo).

**Gospodinjski odpadki** so trdni odpadki, ki nastajajo v gospodinjstvih in zanje ni potrebna posebna obdelava. Zbirajo se v tipiziranih zabojnikih, ki stojijo na javnih površinah, od koder jih redno odvajajo pristojne javne službe. Odlagajo jih na javnih odlagališčih odpadkov.

**Gospodinjskim podobni** so trdni odpadki negospodinjskega izvora. Po sestavi so podobni gospodinjskim in ne zahtevajo posebne obdelave. Nastajajo v trgovini in drugih storitvenih in proizvodnih dejavnostih in jih skupaj z gospodinjskimi odpadki odvajajo pristojne javne službe. Odlagajo jih na javnih odlagališčih komunalnih odpadkov.

**Kosovni odpadki** so odpadki, ki jih zaradi teže, velikosti ali prostornine ni mogoče odvajati kakor vsakdanje gospodinjske odpadke, sicer pa ne zahtevajo posebne obdelave. Odvajajo jih pristojne javne službe v občasnih zbiralnih akcijah.

**Predelava odpadkov** je dejavnost, pri kateri se odpadki ali njihove sestavine predelajo tako, da se jih da znova koristno uporabiti. Zajema predvsem reciklažo (odpadki se predelajo v surovine in ponovno uporabijo) ter uporabo odpadkov kot gorivo v kurilni napravi ali industrijski peči ali uporabo odpadkov za pridobivanje goriva. Sežiganje komunalnih in drugih odpadkov s topotno obdelavo z namenom, da se jih odstrani, ni predelava odpadkov.

**Odstranjevanje odpadkov** je končni način obravnave odpadkov, ki jih ni mogoče predelati, in zajema predvsem različne postopke obdelave odpadkov in odlaganje odpadkov.

**Odlagališče nenevarnih odpadkov** je urejen in nadzorovan prostor, namenjen za odlaganje gospodinjskih in njim podobnih ter drugih nenevarnih odpadkov (inertnih), za katere ni potrebna posebna obdelava.

Radioactive waste is not included in this list, because radioactive waste handling is settled by special regulations.

### Definitions and explanations

**Waste** is any material or object from one of the groups of waste of the List of Waste, which the owner or possessor cannot or does not want to use, does not need, is disturbing or damaging to him and which he removes, intends to or must remove it.

Substances which are emitted into the air and materials which are discharged into the water or into the sewage system are not considered to be waste.

**Hazardous waste** is waste which has one or more of dangerous characteristics (H1 to H14).

Waste oils, oxides, salts, acids, lye, concentrates, colours, lacquers, bitumen, agrochemical and pharmaceutical preparations, special waste from hospitals and other organic or inorganic hazardous waste are considered to be hazardous waste.

Hazardous waste is classified by the Regulation on Changes and Completions of the Regulation on Waste Handling (OJ RS, No. 20/01) in the List of Waste together with other waste and has an asterisk behind the number of waste classification.

**List of Waste** (LoW) includes non-hazardous and hazardous waste classified by proper group with regard to source of waste formation. In addition to the precisely defined name, every waste has a proper classification number of waste.

**Public waste removal** is an activity performed in the public interest by a competent public service (enterprises engaged in community service activities and other enterprises authorized to perform such activity or which hold a license or a concession).

**Household waste** is solid waste originating in households, which does not require special treatment. Household waste is collected in standardized containers standing on public land and removed regularly to public landfill sites by the competent public service.

**Waste similar to household waste** is solid waste of non-household origin not requiring special treatment. Such waste originates in commerce and other service and production activities and is removed, together with household waste, by the competent public service. It is taken to public landfill sites.

**Bulky waste** is waste which, while not requiring special treatment, cannot be removed as everyday household waste due to its weight, size or volume. Such waste is removed by the competent public service in periodic collections.

**Waste recovery** is designed for beneficial use of waste or waste components, comprising first of all recycling, reuse, composting, use of waste in fuelling devices and industrial ovens, and use of waste for fuel generation. Incineration of waste and other thermal procedures designed for waste disposal are not considered to be waste recovery.

**Waste disposal** is an operation aimed at final treatment of waste that cannot be recovered, comprising mostly different waste processing procedures and waste landfilling.

**Municipal waste landfill site** is a regulated and supervised area intended for landfilling household and similar waste and other non-hazardous (inert) waste which does not require special treatment.

## ELEMENTARNE NESREČE

### Viri podatkov

Podatke o ocenjeni gmotni škodi, ki so jo povzročile elementarne nesreče v preteklem letu, zbiramo vsako leto s statističnim vprašalnikom ELNES.

### Zajetje

V podatkih je zajeta vsa ocenjena gmotna škoda po posameznih elementarnih nesrečah, o katerih so nam poročale občine.

Pri tem velja opozoriti, da občine nimajo popolnega pregleda nad zasebnimi in drugimi sredstvi.

### Definicije in pojasnila

**Škoda** je izguba, ki je lahko nastala na sredstvih in drugih dobrinah zaradi elementarne nesreče ali drugega vzroka. Vrste škode:

- neposredna (direktna) škoda na poškodovanih in uničenih sredstvih in dobrinah;
- posredna (indirektna) škoda;
- stroški, ki so nastali kot posledica neposredne škode.

**Vzroki za nastanek naravne nesreče** so lahko različne narave: poplave (zaradi preobilnega deževja ali prehitrega taljenja snega), gozdni požari, snežni plazovi, zemeljski plazovi, potresna aktivnost, vulkanski izbruhi ali pa različni meteorološki vzroki, kot so razna neurja (nevihite, snežni meteži) ali hud mraz (pozeba, žled). Pogosto se dogaja, da izhajata dva vzroka drug iz drugega, eden je prvočini, drugi pa drugotni (npr. udarec strele povzroči gozdni požar, poplava porušitev jezu); tedaj se kot vzrok upošteva tisti, ki je povzročil škodo.

**Potres** je naravni pojav, pri katerem pride do manjšega ali večjega premikanja tal, zaradi česar se porušijo in poškodujejo objekti, naprave in druge dobrine; posledica so ranjeni in mrtvi.

**Poplava** lahko nastane zaradi delovanja zunanjih in notranjih voda ali zaradi hudournikov in planinskih voda.

**Poplava zaradi delovanja zunanjih voda** je (občasno) stihiski poplavljvanje terena (doline večjih vodnih tokov) zaradi izlivanja vode čez obrambne nasipe in jezove ali predore nasipov oziroma rušenje jezov in drugih varstvenih hidrogradbenih objektov. Pri tem so upoštevane tudi poplave, ki nastanejo zaradi ledeni ovir v vodnih tokovih.

**Poplava zaradi delovanja notranjih voda** je poplavljvanje terena (nižinski predeli) z odvečnimi površinskimi vodami in visokimi talnimi vodami zaradi nenormalnega hidrološkega stanja in zaradi počasnega odvajanja teh voda (ni odvodnega omrežja ali so njegove zmogljivosti nezadostne).

**Poplavljvanje zaradi hudournikov in planinskih voda** je nepričakovano poplavljvanje terena z vodno maso, ki nastane na hudourniških tokovih in pri koncentraciji planinskih voda zaradi hitrega naraščanja vode, velike količine kamnitih naplavin in mulja ter velike rušilne moči neposredno po močnih krajevnih plohah in hitrem taljenju snega.

**Suša** je daljše obdobje, v katerem ne pada dovolj padavin za normalni razvoj in dozorevanje kmetijskih rastlin, kar negativno vpliva na velikost in kakovost pridelka, zato je ta bistveno manjši od triletnega povprečja.

**Neurje** je veter s hitrostjo 17,2 m na sekundo oziroma 82 km na uro ali več, ki lomi veje in debla, valja in lomi posevke, stresa plodove s sadnega drewnja in prizadene škodo dobro vzdrževanim gradbenim objektom.

**Toča** je atmosferska padavina v trdnem stanju (led) s premerom 5 mm ali več, ki s svojim udarcem močno poškoduje ali uniči kmetijske kulture, lahko pa povzroči škodo tudi na drugih objektih (gradbenih ipd.).

## NATURAL DISASTERS

### Data sources

We collect data on estimated damage caused by natural disasters in the previous year with the Report on Estimated Damage Caused by Natural Disasters (ELNES).

### Coverage

The data cover all estimated damage caused by individual natural disasters reported by municipalities.

It should be mentioned that the municipalities do not have the incomplete overview over the ownership of the means and goods.

### Definitions and explanations

**Damage** is loss on means and goods caused by a natural disaster or by some other reason. Types of damage:

- direct damage on damaged or ruined means and goods;
- indirect damage;
- consequential costs as the result of direct damage.

There are different **reasons for natural disasters**: floods (because of heavy rain or fast melting snow), forest fires, snow and land avalanches, seismic activities, volcano eruptions or various meteorological reasons such as storms (thunderstorms, blizzards) or heavy colds (frosts, freezing rain). Often there are primary and secondary reasons (e.g. a thunderbolt can be the reason for a forest fire, a flood can be the reason for destroying a dam); in such cases the reason is the one that caused the damage.

**Earthquakes** are natural phenomena where smaller or greater movement of earth is observed which causes collapsing or ruining of buildings, equipment, etc.; the results are injured and dead people.

**Floods** can be caused by activity of surface and underground waters or because of steep mountain streams and rivers

**A flood caused by surface waters** is uncontrolled flooding of area (valleys of big watercourses) caused by overflowing the dams or by ruining the dams or other hydro protecting objects. Floods caused by the ice barriers in watercourses are also included.

**A flood caused by underground waters** is flooding of area (lowland) by high surface waters and high underground waters caused by high hydrological state and because of slow draining of these waters (there is no drainage or drainage is of low capacity).

**Floods caused by steep mountain streams and rivers** are cases of unexpected flooding of area as a result of a rapidly raising level of steep mountain streams and a big quantity of stone and slime alluvial material with great destructive power usually after strong showers or fast snow melting periods.

**Droughts** are long periods without enough precipitation for normal growth and ripening of crops, which has a negative impact on its quantity and quality, i.e. the crop is considerably lower than a three-year average.

**Thunderstorms** are strong winds blowing with a speed of 17.2 m per second or 82 km per hour or more and breaking branches and trunks, destroying the crops, shaking down the fruits and causing the damage to buildings.

**Hail** is atmospheric precipitation in solid state (ice) of 5 mm or more in diameter, which can severely damage or destroy crops or cause damage to buildings.



**Pozeba** je nastanek ledenih kristalov, ki se pri temperaturi, nižji od 0 °C, v različnih oblikah kopičijo na vodoravnih in navpičnih površinah; imenujemo jo lahko tudi slana ali ivje. Slana in ivje lahko močno poškodujeta kmetijske kulture.

**Žled** je tanka ledena obloga na drevju, napeljavah ali skalovju.

**Drsenje tal in snega:**

- drsenje tal so nenadni geološki premiki zemeljske površine na poševnih terenih z jasnimi znaki prelomov na površini tal in drsenja, ki nastajajo v kratkem času in jih spremljajo močne deformacije in široke razpoke ter povzročijo škodo na gradbenih objektih;
- sem prištevamo tudi škode, nastale zaradi snežnih in kamnitih plazov, snežnih zametov.

**Epidemija** je nenaden izbruh in hitro širjenje kakih nalezljivih bolezni, ki po številu primerov, času, kraju in zajetu prebivalstva ni običajan, ter nenavadno povečanje števila obolenj z zapleti ali s smrtnim izidom. Epidemija je tudi pojav dveh ali več med seboj povezanih obolenj za nalezljivimi boleznimi, ki se niso nikoli ali se niso več let pojavila na posameznem območju, ter pojav večjega števila obolenj, katerih povzročitelj ni znan, spremlja pa jih febrilno stanje. Množični pojav teh bolezni lahko povzroči motnje v delovanju poslovnih subjektov ter znatno škodo v delovnem procesu.

**Epizootija** je nenaden izbruh in hitro širjenje kakih nalezljivih bolezni pri živalih, ki lahko povzroči veliko gospodarsko škodo. Rastlinski škodljivci in rastlinske bolezni (te se lahko pojavijo tudi kot posledica invazije rastlinskih škodljivcev) prav tako lahko povzročijo veliko gospodarsko škodo.

**Požar** je vsak ogenj, ki je nastal zunaj kontroliranega ognjišča, ali ogenj, ki se je od tod razširil in se lahko naprej razvija z lastno močjo, pri tem pa povzroči materialno škodo.

**Onesnaženost zemljišča** je posledica izlivanja onesnaženih in strupenih vod iz rudniških flotacij in različnih drugih proizvodnih obratov, neustrezne uporabe kemičnih sredstev v kmetijski proizvodnji in drugih vzrokov. Kadar to onesnaženje preseže meje dopustne koncentracije, povzroči veliko in tudi dolgotrajno škodo na zemljišču, rastlinstvu, živilstvu, vodi in zdravju prebivalstva.

**Onesnaženost voda** (kopenskih in morja) je posledica naravnega in veliko intenzivnejšega onesnaževanja z organskimi substancami, različnimi kemijskimi spojinami, radioaktivnimi in drugimi nevarnimi snovmi (težke kovine, pesticidi, herbicidi itd.) iz industrije, kmetijstva in drugih oblik proizvodnje in storitev, iz urbanih okolij itd., ne glede na to, ali gre za namerna ali naključna onesnaženja, ki nastanejo kot stranska posledica neke okvare (akcidentne havarije). Vse to zmanjšuje uporabnost vode ne le za pitje, temveč tudi za druge namene. Nepovratno ali za daljše obdobje uničuje rastlinstvo in živilstvo v vodah in ogroža zdravje in življenje prebivalstva.

**Onesnaženost zraka** nastane z izpuščanjem plinastih snovi in trdnih delcev iz procesa zgorevanja, industrijskih procesov in motornih vozil. Zaradi izpuščanja onesnažujočih snovi v ozračje (zrak) se pojavljata kisli dež in smog. Onesnaženi zrak povzroča škodo na objektih, površinskih in talnih vodah, gozdovih in drugi vegetaciji, vodnih rastlinah in živalih ter ogroža zdravje prebivalstva.

**Druge nesreče** so nesreče, ki jih povzroči človek s svojo dejavnostjo in ravnanjem ali ki se zgodijo, ko različni dogodki pri opravljanju določene dejavnosti ali upravljanju sredstev za delo ter pri ravnanju z nevarnimi snovmi uidejo nadzoru in posledično ogrožijo življenje ali zdravje ljudi, živali, premoženje, kulturno dediščino ter okolje. Tudi take nesreče lahko povzročijo občutno škodo in tudi to je treba prav tako oceniti. Zaradi tehničnih pomanjkljivosti, zastarele tehnologije, nezadostnih varstvenih

**Frost** is the appearance of frozen crystals, which are at the temperature lower than 0°C gathered on horizontal or vertical surface and can be called white frost. White frost can cause severe damage to crops.

**Sleet** is frozen deposit on trees, installations or rocks.

**Land and snow slide:**

- a landslide is caused by unexpected geological surface movement on the slopes with evident signs of ruptures on the surface and sliding. They are noticed in a short time, are accompanied by great deformation and wide fissures and cause great damage to the buildings;
- the damage caused by avalanches (snow and rocky) and snowdrifts are included.

An **epidemic** is the unusual growth of people falling sick (considering the cases, time and place) because of the infectious diseases. It means also many cases with the complications or even deaths. An epidemic is also the case when two or more infectious diseases, which have not been observed for a long time or never, outbreak in a combination. An epidemic is also a great number of sick people with high temperature, with the reason being unknown. A great number of such illnesses can cause some troubles in administration or considerable damage in the working process.

**Epizootic** (epidemic animal infectious diseases) is unusual growth of animals falling sick because of the animal infectious diseases and can cause a great economic loss. Pest and other plant diseases as the result of pest invasion can also cause a great economic loss.

**Fire** is any blaze that has started outside the fireplace or has escaped from it and is expanding so much that it causes great material damage.

**Land pollution** is the result of discharging polluted or poisonous water from mine flotations and other manufacturing businesses, improper use of chemical substances in agricultural production and other reasons. When pollution exceeds the maximum allowed concentration it can cause big and long lasting damage on the fields, flora and fauna, water and people's health.

**Water pollution** (surface waters and sea) can be caused by natural reasons or by much more intense polluting with organic substances, various kinds of chemicals, radioactive and other dangerous substances (heavy metals, pesticides, herbicides, etc.) from industry, agriculture and other forms of production and services, from urban areas, etc., irrespective of whether pollution is made on purpose or accidentally or is a side effect of some damage (accidental damage). All such events diminish the use of water not only for drinking but also for other purposes. The flora and fauna can be ruined or destroyed for longer time, which means a great threat for people's health and life.

**Air pollution** is caused by emission of gaseous substances and solid particles from combustion processes, industrial processes and traffic. Acid rain and smog are the results of emission of polluting substances. Polluted air can cause a lot of damage on buildings, surface and underground waters, forest and other vegetation, water vegetation, animals and is also a great threat to people's health.

**Other accidents** are accidents caused by human activities. Various accidents can happen while handling hazardous substances and the result could be threatening the life or health of people, animals, property, cultural heritage or environment. Such accidents can cause a great economic loss, which needs to be estimated. Sometimes technical deficiencies, out-of-date technology, inadequate safety precautions and wrong use of some materials cause different accidents such as

ukrepov in napačne uporabe materialov nastajajo razne oblike okvar (havarij), ki lahko povzročijo eksplozije, požare, pokanje posod in izlivanje njihove vsebine, rušenje; vse to lahko povzroči precejšnjo gromotno škodo npr. v rudnikih, v gospodarskih obratih in drugih javnih objektih. Iz navedenih vzrokov lahko pride tudi do sevanja na predmete, prebivalce, rastlinstvo in živalstvo.

## INVESTICIJE IN TEKOČI IZDATKI ZA VARSTVO OKOLJA

### Viri podatkov

Podatki o investicijah in tekočih izdatkih za varstvo okolja za leto 2004 so rezultat rednega raziskovanja OKI in rednega statističnega raziskovanja OKI-S, ki ju je Statistični urad Republike Slovenije izvedel v letu 2005. Vprašalnika sta usklajena z zahtevami Eurostata. V raziskovanju OKI je poudarek na zbiranju kakovostnejših podatkov iz ruderstva, predelovalnih dejavnosti in dejavnosti oskrbe z električno energijo, plinom in vodo. Zaradi obstoječe časovne vrste podatkov, zbrane v prejšnjih letih, zbiramo podatke tudi iz drugih področij dejavnosti. Z raziskovanjem OKI-S pa zbiramo podatke pri izvajalcih služb za varstvo okolja (tistih, ki spadajo v področja dejavnosti 37, 41 in 90).

Podatke pridobimo neposredno od podjetij in drugih organizacij.

### Zajetje

Raziskovanje OKI smo izvajali na vzorcu. Zaradi primerjav s podatki o investicijah v osnovna sredstva smo vzorčni okvir za raziskovanje o izdatkih za varstvo okolja tvorili iz enot, ki so bile izbrane za raziskovanje o investicijah v osnovna sredstva.

Podatki so prikazani po organizacijskem načelu, to je po pretežni dejavnosti in sedežu investitorja.

Odzivnost poročevalskih enot je bila 90-odstotna, o investicijah za varstvo okolja je poročalo okoli 21 % enot, o tekočih izdatkih pa skoraj 60 % enot.

Za neodgovor smo izvedli preračun na celotno populacijo z razmernostno cenilko, in sicer tako, da smo uporabili podatkovno bazo o davku na dodano vrednost Davčne uprave Republike Slovenije oz. število zaposlenih.

Za uteževanje podatkov o plačilu storitev v zvezi z varstvom okolja se v vseh stolpcih te vrstice uporablja druga utež. Pri izračunu uteži smo predpostavili, da imajo omenjeni izdatek vse aktivne enote. Izračuni so bili izvedeni po istem postopku kot pri izračunu prve uteži.

Raziskovanje OKI-S smo izvajali pri izvajalcih služb za varstvo okolja, in sicer tistih, ki spadajo v področja dejavnosti 37, 41 in 90 in imajo več kot 10 zaposlenih. Odgovor je bil skoraj 90-odstoten.

### Definicije in pojasnila

Podatki o **investicijah v varstvo okolja** se delijo na investicije v varstvo okolja na koncu proizvodnega postopka in na investicije v varstvo okolja med proizvodnim postopkom. **Tekoči izdatki za varstvo okolja** pa so razdeljeni na tekoče izdatke za varstvo okolja, ki nastanejo v poročevalski enoti in so namenjeni raziskavam in razvoju, delovanju in vzdrževanju naprav za zmanjševanje obremenjevanja okolja, izdatkom za zaposlene, ki so udeleženi pri varstvu okolja ter na druge tekoče izdatke, ki so nastali v poročevalski enoti. Tekoči izdatki, ki so plačani drugim, se delijo na plačilo raziskav in razvoja, storitev drugim (javnemu sektorju ali specializiranim izvajalcem za storitve zbiranja odpadkov, čiščenje odpadnih voda), monitoringe in druge tekoče izdatke za storitve zunanjih izvajalcev.

explosions, fire, outpouring of substances or ruining, which can cause great material damage in mines, industrial buildings and other public facilities. Some of these reasons can also cause radiation of objects, people, flora and fauna.

## GROSS FIXED CAPITAL FORMATION AND CURRENT EXPENDITURE FOR ENVIRONMENTAL PROTECTION

### Data sources

Data on gross fixed capital formation and current expenditure for environmental protection for 2004 are the result of regular surveys OKI and OKI-S that were carried out by the Statistical Office of the Republic of Slovenia in 2005. The questionnaires are harmonized with the demands from Eurostat. Regular survey data collection OKI was focused mainly on better quality data from Mining and quarrying, Manufacturing and Electricity, gas and water supply. Because of the existing time series, we have decided to collect data also from other fields of activities. With the OKI-S survey we collect data from the enterprises that are performing environmental protection activities (fields of activity 37, 41 and 90)

Data are collected directly from enterprises and organisations.

### Coverage

We carried out the sample survey (OKI). Due to the comparison with data gathered with the Annual Report on Gross Fixed Capital Formation, we decided to take the sample for the pilot survey from the Annual Report on Gross Fixed Capital Formation units.

Data are shown according to the predominant activity and location of the investor.

The response rate in data collection was 90%, of which 21% of units responded about gross fixed capital formation for environmental protection and almost 60% of units about current expenditure.

For non-response we performed recalculation to the total population with the ratio estimator, using the value added tax database of the Tax Authority or the number of employees.

For the recalculation of the payments for the environmental protection services, another weight, calculated according to the estimation that all active units have such expenses, was used. Recalculation was made under the same procedure as for the first weight.

The OKI-S survey was carried out with enterprises performing environmental protection activities (fields of activity 37, 41 and 90) and having more than 10 persons in paid employment. The response rate was almost 90%.

### Definitions and explanations

**Gross fixed capital formation** for environmental protection is divided into end-of-pipe investment and investment in integrated technologies. **Current expenditure for environmental protection** is divided into internal current expenditure and external current expenditure. Internal current expenditure is earmarked for the research and development, for the maintaining of the environmental protection facilities, for personnel costs and other internal current expenditure. External current expenditure is earmarked for the research and development, payments to the third parties for environmental protection services, monitoring and other current expenditures.



Podatki so zbrani glede na okoljski namen po Klasifikaciji aktivnosti in izdatkov za varovanje okolja, in sicer na izdatke za: varstvo zraka in klime, upravljanje odpadnih vod, ravnanje z odpadki, zaščito in izboljšavo tal, podtalnice in površinskih vod, varstvo pred hrupom in vibracijami, varstvo biološke raznovrstnosti in pokrajine in druge okoljske namene, kamor vštevamo izdatke za raziskovanje in razvoj v zvezi z varstvom okolja, zmanjšanje in odstranjevanje negativnih posledic radioaktivnega sevanja in druge okoljske namene.

Data are collected according to the environmental domain under the Classification of the Environmental Protection Activities: protection of air and climate, wastewater management, waste management, protection and remediation of earth, underground and surface waters, protection against noise and vibrations, protection of biodiversity and landscape, and other environmental domains where protection against radiation is included.

**Sestavila / Prepared by:** Sulejma Čehič, Mojca Žitnik, Danica Bizjak, Metka Pograjc, Saša Čuček, Polonca Razboršek, Zdenko Klemen

Izdaja, založba in tisk Statistični urad Republike Slovenije, Ljubljana, Vožarski pot 12 - **Uporaba in objava podatkov dovoljena le z navedbo vira** - Odgovarja generalna direktorica mag. Irena Križman - Urednica zbirke Statistične informacije Marina Urbas - Urednica podzbirke Mojca Žitnik - Slovensko besedilo jezikovno uredila Ivanka Zobec - Angleško besedilo jezikovno uredil Boris Panič - Naklada 345 izvodov - ISSN zbirke Statistične informacije 1408-192X - ISSN podzbirke Okolje 1580-1802 - Informacije daje Informacijsko središče, tel.: (01) 241 51 04 - El. pošta: info.stat@gov.si - <http://www.stat.si>.

Edited, published and printed by the Statistical Office of the Republic of Slovenia, Ljubljana, Vožarski pot 12 - **These data can be used provided the source is acknowledged** - Director-General Irena Križman - Rapid Reports editor Marina Urbas - Subject-matter editor Mojca Žitnik - Slovene language editor Ivanka Zobec - English language editor Boris Panič - Total print run 345 copies - ISSN of Rapid Reports 1408-192X - ISSN of subcollection Environment 1580-1802 - Information is given by the Information Centre of the Statistical Office of the Republic of Slovenia, tel.: +386 1 241 51 04 - E-mail: info.stat@gov.si - <http://www.stat.si>.