



## **ENVIRONMENTAL STATISTICS**

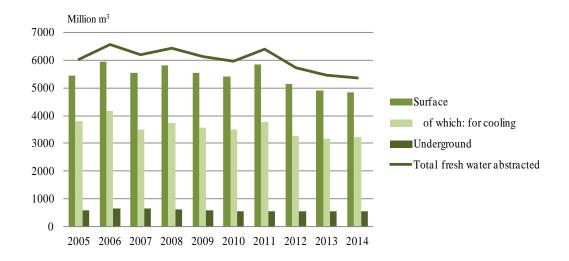
### Annual data for 2014

The National Statistical Institute presents to the users results from annual surveys in the domain of environmental statistics for 2014. More detailed data on specific topics can be found in the heading 'Environment' on the NSI web site: http://www.nsi.bg

### 1. Water

The level of water abstraction in the country is determined both by the structure and intensity of the economy, and the climate factors. The total abstracted fresh water for the economy for the period 2010 - 2014 is estimated on average at 5 781 million m³. The highest level of abstraction is recorded in dry 2011 (6 385 million m³), and the lowest - in relatively wet 2014 (5 376 million m³). Compared to 2013, the water abstraction from underground and surface sources decreased at approximately the same level (about 2%). This decrease is formed mainly by abstraction of water taken for agricultural activities (by about 12% compared to 2013), but increased water abstraction for cooling in the energy generation (constituting 60% of the total abstraction). Decline in abstraction was registered in South Bulgaria, while in Northern Bulgaria is at the same level as in 2013.

Figure 1 Fresh water abstraction (excluding water for hydropower generation)







Water use in 2014 compared to 2013 was characterized by reduced water supply from public water supply (PWS) and irrigation systems. The system input water by the PWS in 2014 is 879 million m<sup>3</sup> or 95.2% from the level of 2013. The reduction is determined by the lower water consumption by households and services that constitute 84% of total water invoiced. The volume of total water losses in the PWS system decreases, but the share in 2014 is the same as in 2013 - 58% of water supplied (61% in 2010).

At the same time, the water used for mining and manufacturing industry (production of food products, beverages, paper, paperboard and articles). In absolute volume the most significantly increases the water used for cooling processes in the energy production, which was obtained through self-supply.

In spite of sectoral changes, the total volume of water used for the economy in 2014 (4 506 million m<sup>3</sup>) is close to the level of 2013. In the period 2010 - 2014 were not registered significant changes in the structure of the water used by purpose.

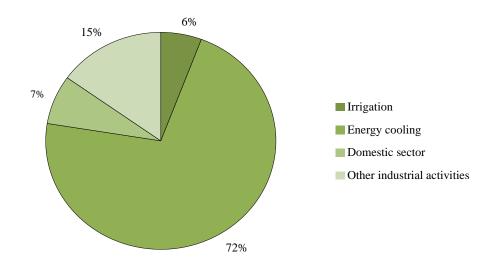


Figure 2 Structure of water used by purpose in 2014

Additionally, in 2014 for the hydropower production was processed a total of 24.5 billion m<sup>3</sup> raw water (44% more than in 2013).

In 2014, 0.6% of the population were on regime of limited water use (mainly in the 'Severozapaden' region), but the amount of drinking water supplied by the PWS partnerships to households was reduced - from 99 l/day (2013) to 96 l/day average per capita (2014). Regional data show that in 2014 the highest consumption of water was registered in households of South Bulgaria - an average of 101 l/day/per capita, while in Northern Bulgaria it is by 15 litres less. Households living in the villages consumed 87 l/day/per capita, and those in the cities - with 12 litres more.





In 2014 from point sources are generated around 442 million m<sup>3</sup> of wastewater and 3 003 million m<sup>3</sup> of wastewater from cooling processes - total they account for nearly 76% of the water used. The total volume of wastewater discharged into water bodies in 2014 is estimated at 768 million m<sup>3</sup> (excluding cooling water), of which almost 70% - after treatment in urban and other treatment plants. About 62% of industrial water was treated on site before discharge into water bodies (60% in 2013).

In 2014, were functioning 89 urban wastewater treatment plants (UWWTP) of which 56 - with secondary treatment, and 24 - with extra treatment after the secondary. Nearly 75% of the population is connected to public sewerage network, of which 56.8% is related to the UWWTP.

## 2. Environmental protection expenditure and tangible fixed assets related to the environment

# 2.1. Expenditure on protection and restoration of the environment

Environmental protection includes all activities which are directly oriented to prevent, reduce and eliminate pollution resulting from the production or other processes.

Removal of damages on the environment requires additional funds. The amount of funds is a key indicator of the measures the state and society undertake to reduce the negative impact of socio-economic processes on the environment.

In 2014, 2 293 million BGN were spent on protection and restoration of the environment. There is an increase compared to the previous year and for this reason the share of environmental expenditure as a percent of GDP is considered the more appropriate indicator for the purposes of comparison. In the 2014 it is 2.7% while in 2013 it was 2.6%.

Figure 3 Share of environment expenditure of GDP





Environmental expenditure includes two components: expenditure on maintenance, and expenditure on acquisition of tangible fixed assets. In 2014, similarly to the previous 2013, current expenditure has a predominant share (54.1%), in the expenditure's structure, while that of investment is smaller (45.9%).

In 2014, the total expenditure on protection and restoration of the environment is allocated by major directions of ecological use in a following way: the greatest was the share of the expenditure on waste disposal and recovery (47.5%), followed by the share of expenditure on wastewater treatment (31.5%), and the expenditure on preserving the air purity (13.6%).

## 2.2. Tangible fixed assets with ecological use

At the end of 2014 the available tangible fixed assets with ecological use amount to 6 617 million BGN. The available fixed assets with ecological use are allocated by basic directions of ecological use as follows: for wastewater treatment - 36.6%, for air preserving - 35.0% and for waste - 20.5%.

### 3. Municipal waste

Municipal waste is the waste resulting from the activities of people at home and in administrative, social and public buildings. Included here is also the waste from commercial outlets, crafts, resort and entertainment facilities when being non-hazardous, and at the same time its quantity or composition will not prevent its treatment together with the household waste.

Used data for 2014 are obtained both from the regular statistical survey on municipal waste, and the National information system for waste of the Executive Environmental Agency.

In 2014, the total municipal waste generated was estimated at 3 193 thousand tons. During the same year 1 265 thousand tons of municipal waste were landfilled. Waste directly transmitted for recycling in 2014 is 298 thousand tons. Waste transmitted to facilities for secondary treatment amounted to 1 598 thousand tons. The collected construction waste on municipal landfill sites amounts to 534 thousand tons in 2014. The quantity of collected municipal waste is assessed by means of direct measurement, and in case of lack of weighing equipment - on the basis of transport documents.

The regional landfills construction is still in process. At the same time landfills constructed in the past which do not respond to the ecological criteria are closed down. The number of municipal waste systems in 2014 is 161, of which 27 are regional.

The organized waste collection systems' implementation in new settlements in 2014 also led to an increase of the population served by organized waste collection systems (99.6%). The number of settlements served in 2014 was 4 578. At the same time the quantity of collected municipal waste per capita of served population for 2014 is estimated at 443 kilograms.