



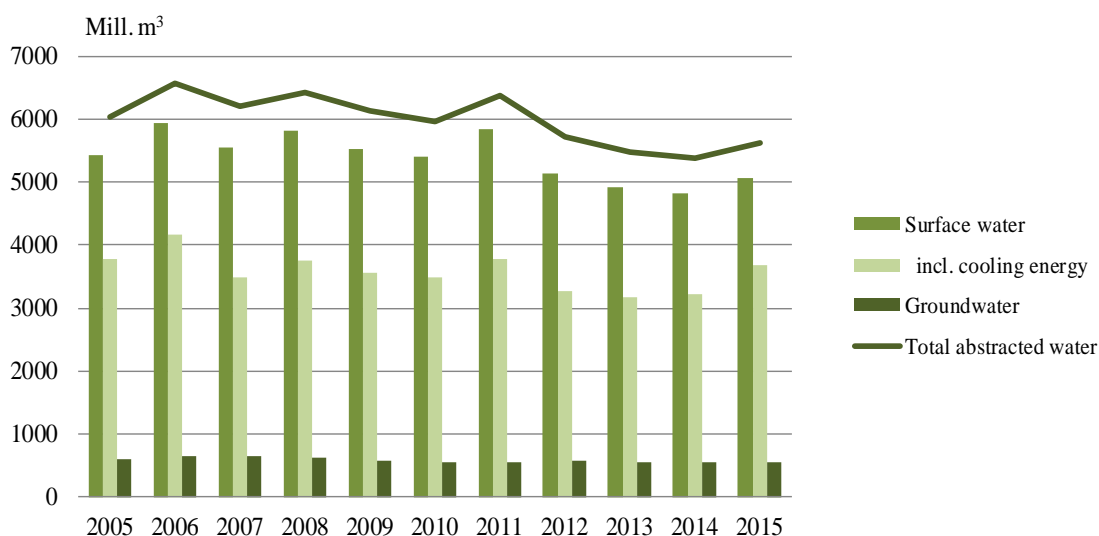
## ENVIRONMENTAL ACCOUNTS - ANNUAL DATA FOR 2015

The National Statistical Institute presents to the users results from annual surveys in the domain of environmental statistics for 2015. 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 climatic factors. In 2015, abstracted freshwaters for economy increased to 5 629 million m<sup>3</sup> or by about 4.7% more compared to 2014. Abstraction of surface water increased by 5.0% compared to the previous year, mainly due to increasing water use in energy, and water demand for agricultural activities. Growth was also recorded of the extracted groundwater (by 2.0% compared to 2014), mainly for public water supply.

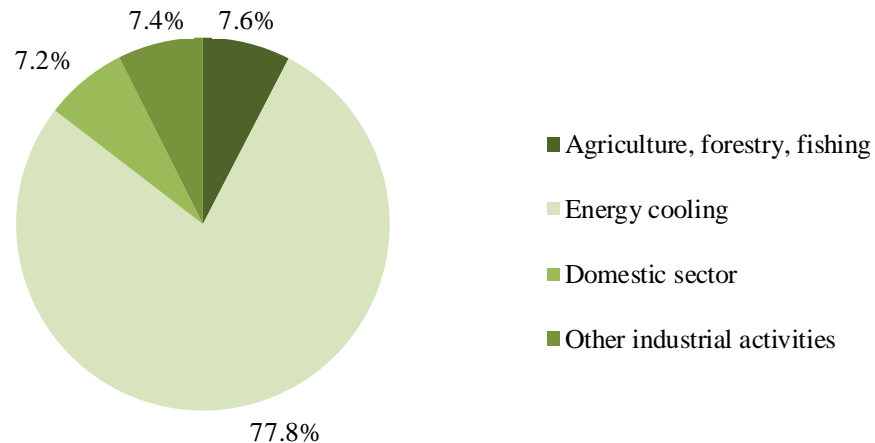
**Figure 1. Fresh water abstraction (excluding water for hydropower generation)**



The total use of freshwater and non-freshwater for economy in 2015 is estimated at 4 736 million m<sup>3</sup> (5.1% more than in 2014). The most significant increase water for cooling processes in the energy sector (14.0% compared to 2014), whose share reached to 77.8% of the total water consumption in 2015. Growth of the water used is registered and in the manufacturing industry (e.g. Production of food products and beverages, basic metals). Water used for irrigation in the agricultural sector also increased - by 22.5% compared to 2014 and reaching 316 million m<sup>3</sup>. Water consumption in the service sector also increased.



**Figure 2. Structure of water used by purpose in 2015**



Additionally, in 2015 the production of hydro power processed a total of 26.9 billion m<sup>3</sup> of raw water (by 9.9% more than in 2014).

About 8.0% of the water used in the country is provided by public water supply. The amount of water supplied to households increased, which is constituting 80.0% of total consumption. The most significant increases consumption in the services sector is in Yuzhna Bulgaria. In 2015, increases water consumption by households - 99 l day/per capita (96 liters/day in 2014). An increase was registered in all districts, except the district Sofia (stolitsa). Despite the saving, households in district Sofia (stolitsa) have the highest consumption (127 liters/day/per capita), followed by district Burgas (111 l/day/per capita). The lowest water consumption is in the district Targovishte (67 l/day/per capita).

In line with the increase of the water supplied is increasing the absolute volume of total water losses in the water sector. However, a decrease is registered in their share in the recent years. Total water losses in 2015 are estimated at 57.9% of the supplied water (60.6% in 2010).

In 2015, from point sources are generated around 426 million m<sup>3</sup> of wastewater and 3 685 million m<sup>3</sup> of processed water from cooling processes - total they account for nearly 86.8% of the water used.

The total volume of wastewater discharged into water bodies in 2015 is estimated at 804 million m<sup>3</sup> (excluding cooling water), of which 72.0% - after treatment in urban and other wastewater treatment plants. About 64.6% of industrial water was treated on site before discharge into water bodies (62.0% in 2014). In the recent years were built and modernized many urban wastewater treatment plants (UWWTP). At the end of 2015 were registered totally 163 UWWTP, of which 105 plants with a capacity of over 2 000 population equivalent. Population connected to UWWTP increased from 47.8% (2010) to 62.3% (2015). The water and sewerage network is reconstructed. In 2015, the newly built and reconstructed/changed water supply network (operated by PWS) amounts to 777 km and that of sewerage network - 249 kilometers. The material of pipes is renewing. The comparison



with 2010 shows a decrease in the proportion of eternit pipes and concrete sewage networks at the expense of polyethylene. The research of the age of the water networks shows that 71.2% of the water supply network was put into operation in the period 1961 - 1990, while 13.5% - in 1991 - 2015. Around 59.9% of sewerage network was put into operation in the period 1961 - 1990, while 19.0% in the period 1991 - 2015.

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

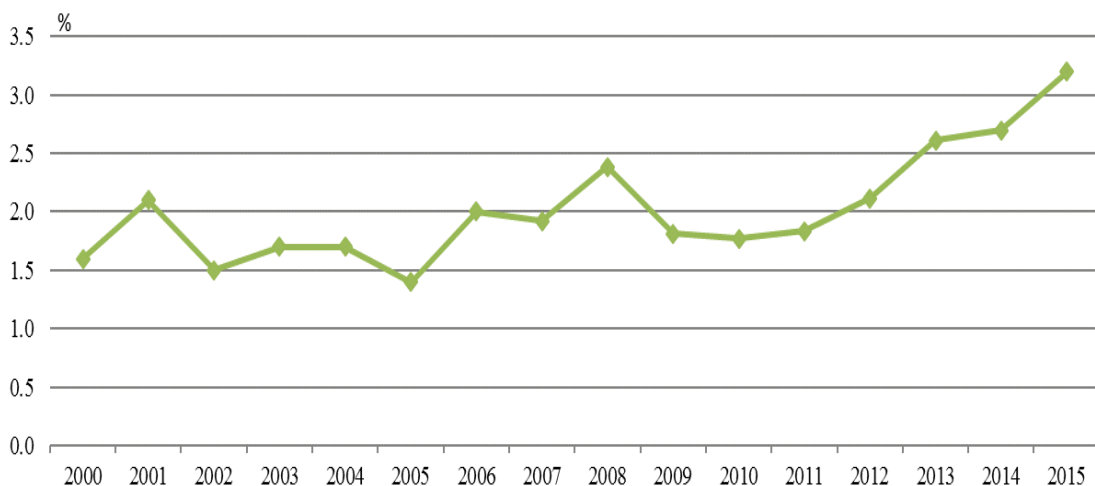
### 2.1. Expenditure on protection and restoration of the environment

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 2015, 2 833 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 2015 it is 3.2% while in 2014 it was 2.7%.

**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 2015, investments have a predominant share (57.4%) in the expenditure's structure while the share of current expenditure is smaller (42.6%).

In 2015, 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 (47.3%), followed by the share of expenditure on wastewater treatment (36.9%), and the expenditure on preserving the air purity (8.5%).

## **2.2. Tangible fixed assets with ecological use**

At the end of 2015 the available tangible fixed assets with ecological use amount to 8 343 million BGN. The available fixed assets with ecological use are allocated by basic directions of ecological use as follows: for wastewater treatment (37.9%), for air preserving (29.2%) and for waste (25.0%).

## **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.

For 2015 used data are obtained both from the regular statistical survey on municipal waste, and the National information system for waste of the Executive Environmental Agency.

In 2015, the total municipal waste generated was estimated at 3 011 thousand tons. During the same year 1 856 thousand tons of municipal waste were landfilled. Waste directly transmitted for recycling in 2015 is 154 thousand tons. Waste transmitted to facilities for secondary treatment amounted to 1 002 thousand tons. The collected construction waste on municipal landfill sites amounts to 466 thousand tons in 2015. The quantity of municipal waste collected 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 that do not respond to the ecological criteria are closed down. The number of municipal waste systems in 2015 is 151, of which 43 are regional.

The organized waste collection systems' implementation in new settlements in 2015 also led to an increase of the population served by organized waste collection systems (from 99.56% in 2014 to 99.58% in 2015). The number of settlements served in 2015 was 4 593. At the same time the quantity of collected municipal waste per capita of served population for 2015 is estimated at 420 kilograms.