

3. ENVIRONMENT

The environment comprises anything that creates natural conditions for the existence of organisms, including human beings, and is a prerequisite for their further evolution. Its compartments are especially air, water, rocks, soil, organisms, ecosystems, and energy.

The Act of the Czech National Council No 114/1992 Sb, on nature conservation and landscape protection distinguishes six categories of specially protected areas as follows.

Large-size protected areas

- *National parks are large areas unique at the national or international scales, major parts of which are occupied by natural or nature-close ecosystems where species of flora and fauna, and abiotic nature are of extraordinary scientific and educational importance; and*
- *Protected landscape areas are large areas with harmonically formed landscape, characteristic relief, significant shares of forest and permanent grassland natural ecosystems, high abundance of tree species, or, as the case may be, preserved monuments of historical settlements.*

Small-size protected areas

- *National natural monuments are smaller natural formations (including those formed by human activity besides the forces of nature), deposits of minerals or habitats of endangered species on fragments of ecosystems of the national or international environmental, scientific, or aesthetic importance;*
- *National nature reserves are smaller areas where ecosystems important at the national or international levels of extraordinary natural value are bound to natural their relief with a typical geological structure;*
- *Natural monuments are areas defined similar way as the national natural monuments yet important at the regional level only; and*
- *Natural reserves are smaller areas of concentrated natural value with represented ecosystems characteristic to and important for the given geographical area.*

On 1 March 2007 the methodology of the calculation of total land areas of protected areas was changed. Since then the land areas of specially protected areas has been calculated from the boundary perimeter of the specially protected areas instead of formerly given data according to respective decrees establishing the areas.

***Natura 2000** is a system of protected areas which is created by every Member State of the European Union on their territory adhering to unified principles. The Natura 2000 system development was imposed by two most important European regulations on nature protection – the Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds and the Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora. The Natura 2000 system consists of two types of territories of special protection areas (for birds) and special areas of conservation (for habitats and wild fauna and flora).*

***Environmental protection expenditure** includes investment expenditure on the acquisition of tangible fixed assets and non-investment expenditure related to environmental protection activities. **Tangible fixed assets** (TFA) for environmental protection are the sum expended by reporting units on the TFA acquisition (by purchase or own activities) and the total value of the TFA acquired for free or by transfer according to relevant legislation or by a change from private use to business. The **non-investment expenditure** for environmental protection includes wages and salaries, payments for rent, energy and other material, and payments for services the main purpose of which is to protect the environment.*

***Economic benefits from environmental protection activities** refer to revenues from sale of environmental protection services, revenues from sale of by-products, and savings generated from reuse of by-products that originated at activities related to environmental protection.*

***Emissions** shall mean pollutants of various states which are released into the atmosphere. Emissions are given in kilograms per hour or in tonnes per year. Amounts of the given pollutants released into the air are listed in the **Register of Emissions and Air Pollution Sources** (REZZO). Data in tables are broken down by type of pollution sources to REZZO 1–3 (for stationary pollution sources) and REZZO 4 (for mobile pollution sources, especially road motor vehicles, railway vehicles, boats, vessels, and aircraft).*

In 2018 the emission balance for the period 1991–2017 was newly compiled while the new compilation reflected numerous changes to the methodology. The most important changes were the application of the European tool of COPERT 5 for the calculation of emissions from the road transport sector and the use of the CZSO statistical survey ENERGO 2015 for estimation of incineration emissions from households. These two new inputs caused the new published data are essentially different from those published in previous years.

***Waste** shall mean any movable thing which its owner disposes of or intends to dispose.*

*The **municipal waste** shall mean the household waste and similar waste according to the Commission Decision of 18 November 2011 establishing rules and calculation methods for verifying compliance with the targets set in Article 11(2) of Directive 2008/98/EC of the European Parliament and of the Council (notified under document C(2011) 8165). The household waste means waste generated by households and similar waste means waste in nature and composition comparable to household waste, excluding production waste and waste from agriculture and forestry.*

*The **industry of water supply and sewerage systems** involves water management activities related to the administration and operation of water supply and sewerage collection systems that means with the providing for sufficient supply of quality drinking water and for removal of waste water and its treatment. **Public water supply systems and sewerage systems** include water supply systems and sewerage systems established and run in the public interest. The **water produced***

includes both invoiced and non-invoiced water. The sum of data for invoiced and non-invoiced water may differ from amounts of the water produced for an amount of water taken from other organizations, or for water handed over to other organizations.

Since 2014 there has been a more precise definition of sewerage and of water invoiced to households due to an amendment to the Decree No 428/2001 Sb establishing execution of the Act No 274/2001 Sb on public water supply and sewerage systems.

*Since 2013 the “**wastewater discharged into public sewerage systems**” has been including also **levied rainwater**, besides sewerage, industrial, and other wastewater.*

*The **waste water treatment plant (WWTP)** shall mean premises and equipment serving for waste water treatment having the mechanical, biological, and/or further stage of treatment. Equipment used for coarse pre-treatment of waste water (racks, grit traps, oil traps, etc.), cesspools, sumps, and simple devices with a mechanical function, which are not monitored and operated regularly, are not considered to be waste water treatment plants.*

*The **WWTP capacity** refers to the design capacity (m³/day) thereof. A higher capacity than the design one is given where implemented intensification measures have been approved by the water authority.*