

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;*
- *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 nature 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 relief with a typical geological structure;*
- *nature monuments are areas defined in a similar way as the national natural monuments yet important at the regional level only;*
- *nature reserves are smaller areas of concentrated natural values with represented ecosystems that are characteristic and important for the given geographical area.*

On 1 March 2017, the methodology for the calculation of total land areas of protected areas changed. Since then the land areas of specially protected areas have been calculated using borders of the specially protected areas (instead of data from the respective decrees establishing the areas that were used before).

Natura 2000 is a network of protected areas (sites) designated by all Member States of the European Union on their territories under unified principles. Establishment of Natura 2000 network is assigned by two most important legal regulations of the EU for 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. In the territory of the Czech Republic, Natura 2000 comprises of delimited Birds Directive sites (special protection areas, SPAs; in Czech “ptačí oblast”) and of declared Habitats Directive sites (sites of Community importance, SCIs; in Czech “evropsky významná lokalita”).

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 of expenditure spent by reporting units on the TFA acquisition (by a purchase or own activities) along with the total value of TFA acquired for free or by a transfer according to relevant legislation or by the reclassification from the private use to business one. The **non-investment** expenditure for environmental protection includes wages and salaries, payments for rents, energy and other material, and payments for services the principal purpose of which is environmental protection.

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 that 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 Stationary 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 reflecting numerous changes to the methodology. Among the most important changes was an application of the European tool of COPERT 5 for estimation of emissions from the road transport sector and the use of results of the CZSO statistical survey called “ENERGO 2015” for estimation of incineration emissions from households. Data published in the previous years have been substantially changed due to the new methodology.

Waste is any movable thing which its owner disposes of (gets rid of) or intends to dispose of or is obliged to dispose of.

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 **domain of water supply systems and sewerage systems** involves water management activities related to the management and operation of water supply and sewerage systems, i.e. production and distribution of drinking water in a

sufficient amount and of good quality and wastewater collection and treatment. **Public water supply systems and sewerage systems** include water supply systems and sewerage systems established and operated in the public interest. **Water produced** includes both invoiced and non-invoiced water supply. 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 organisations, or for water handed over to other organisations.

From 2014 onwards, there has been a more precise definition of sewerage water and of water invoiced to households due to an amendment to the Decree No 428/2001 Sb implementing the Act No 274/2001 Sb, on water mains and sewerage systems.

From 2013 onwards, “**wastewater discharged into public sewerage systems**” has been including besides sewerage, industrial, and other wastewater also **chargeable rainwater**.

The **wastewater treatment plants (WWTPs)** are premises and equipment serving for wastewater treatment and having the mechanical, biological, and/or other stage of treatment. Equipment for wastewater pre-treatment (rakes, sand traps, oil traps, grit traps, etc.), cesspools, sumps, and simple facilities with a mechanical function, which are not regularly observed and operated, are not considered to be wastewater treatment plants.

The **capacity of WWTPs** is given as the designed capacity in m³/day. A higher capacity than the designed one is given when implemented intensification measures have been approved by the water management authority.