



Explanatory Notes on Main Statistical Indicators

Total Water Resources refers to total volume of surface water and groundwater and is measured as run-off for surface water and replenishment of groundwater with rainfall in local area.

Surface Water Resources refers to total volume of year by year renewable dynamic resources which exist in rivers, lakes, glaciers and other surface water and are the natural run-off of rivers.

Groundwater Resources refers to total volume of year by year renewable dynamic resources which exist in saturation aquifers of groundwater and are measured as replenishment of groundwater with rainfall and surface water.

Duplicated Measurement between Surface Water and Groundwater refers to mutual exchange between surface water and groundwater, i.e. run-off of rivers includes some depletion into groundwater while groundwater includes some replenishment from surface water.

Water Use refers to gross water used by various off-stream water users, including losses during distribution, while excluding the direct use of seawater and in-stream water use such as hydroelectric generation and shipping.

Water Use by Agriculture includes uses of water by irrigation of farming fields, forestry and orchards, irrigation of grassland, replenishment of fishing farms and water used by animal husbandry.

Water Use by Industry refers to new withdrawals of water, excluding reuse of water within enterprises.

Water Use by Living Consumption includes use of water for living consumption in both urban and rural areas. Urban water use by living consumption is composed of household use and public use (including tertiary industry and construction). Rural water use by living consumption includes water used by households.

Water Use for Artificial Eco-environment includes replenishment of rivers and lakes and use for urban environment.

Waste Water Discharged by Industry refers to the volume of waste water discharged by industrial enterprises through all their outlets, including waste water from production process, directly cooled water, groundwater from mining wells which does not meet discharge standards and sewage from households mixed with waste water produced by industrial activities, but excluding indirectly cooled water discharged (It should be included if the discharge is not separated from waste water).

Urban Non-industrial Waste Water Discharge refers to annual discharge of non-industrial waste water by urban households. It is estimated by per capita coefficient using the formula:

$$\text{Urban non-industrial waste water discharge} = \text{urban non-industrial waste water discharge coefficient} \times \text{urban non-agricultural population} \times 365$$

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Chemical Oxygen Demand (COD) refers to the amount of oxygen required when chemical oxidants are used to oxidize organic pollutants in water. A higher value of COD corresponds to more serious pollution by organic pollutants.

Industrial Waste Air Emission refers to the discharge into atmosphere of waste air containing pollutants generated from fuel burning and production processes in enterprises within a given period of time. It is calculated at standard status (273K, 101325Pa) as:

$$\text{Industrial waste air emission} = \text{emission through fuel burning} + \text{emission through production process}$$

SO₂ Emission through Non-industrial and Other Activities is calculated on the basis of consumption of coal by households and other activities and the sulphur content of coal with the following formula:

$$\text{SO}_2 \text{ emission through non-industrial and other activities} = \text{consumption of coal by households and other activities} \times \text{sulphur content} \times 0.8 \times 2$$

SO₂ Emission through Industrial Activities refers to volume of sulphur dioxide emission from fuel burning and production process by enterprises during a given period of time. It is calculated as:

$$\text{SO}_2 \text{ emission through industrial activities} = \text{SO}_2 \text{ emission from fuel burning} + \text{SO}_2 \text{ emission from production process}$$

Industrial Soot Emission refers to the volume of soot in smoke emitted in the process of fuel burning in the premises of enterprises.

Soot Emission by Consumption and Others refers to the net volume of soot emitted by fuel burning from all social and economic activities and operations of public facilities other than industrial activities. It is calculated on the basis of coal consumption by households and others.

Industrial Dust Emission refers to volume of dust emitted by production process of enterprises and suspended in the air for a given period of time, including dust from refractory material of iron and steel works, dust from coke-screening systems and sintering machines of coke plants, dust from lime kilns and dust from cement production in building material enterprises, but excluding soot and dust emitted from power plants.

Common Industrial Solid Wastes Produced refers to the industrial solid wastes that are not listed in the 《National Catalogue of Hazardous Wastes》, or not regarded as hazardous according to the national hazardous waste identification standards (GB5085), solid waste-Extraction procedure for leaching toxicity (GB5086) and solid waste-Extraction procedure for leaching toxicity (GB/T 15555). The calculation



formula is as followed:

Common Industrial Solid Wastes Produced = (common industrial solid wastes utilized – the proportion of utilized stock of previous years) + common industrial solid waste stock + (common industrial solid wastes disposed – the proportion of disposed stock of previous years) + common industrial solid wastes discharged.

Common Industrial Solid Wastes Comprehensively Utilized refers to volume of solid wastes from which useful materials can be extracted or which can be converted into usable resources, energy or other materials by means of reclamation, processing, recycling and exchange (including utilizing in the year the stocks of industrial solid wastes of the previous year) during the report period, e.g. being used as agricultural fertilizers, building materials or as material for paving road. Examples of such utilizations include fertilizers, building materials and road materials. The information shall be collected by the producing units of the wastes.

Common Industrial Solid Wastes Disposed refers to the quantity of industrial solid wastes which are burnt or specially disposed using other methods to alter the physical, chemical and biological properties and thus to reduce or eliminate the hazard, or placed ultimately in the sites meeting the requirements for environmental protection during the report period.

Stock of Common Industrial Solid Wastes refers to the volume of solid wastes placed in special facilities or special sites by enterprises for purposes of utilization or disposal during the report period. The sites or facilities should take measures against dispersion, loss, seepage, and air and water contamination.

Hazardous Wastes refers to those included in the national hazardous wastes catalogue or specified as any one of the following properties in the national hazardous wastes identification standards: explosive, ignitable, oxidizable, toxic, corrosive or liable to cause infectious diseases or lead to other dangers.

Natural Reserves refer to certain areas of land, waters or sea demarked and approved by relevant governments at all levels to put under special protection and management in order to protect the natural environment and natural resources and to promote the sustainable development of the national economy. According to the objects be protected, the natural reserves are classified into classes of natural ecosystem, wild life and natural heritage. Scenic spots and cultural preservation zones are not included.

Abrupt Environmental Accidents refer to environmental emergencies that caused or likely to cause significant casualties, serious property damages and pose a major threat and damage to the economic, social or political stability of the country or a region, or have significant social impact that related to the public safety.

Urban Bridges refer to bridges built to cross over natural or man-made barriers, including bridges over rivers, overpasses for traffic and for pedestrians, underpasses for pedestrians, etc. Both permanent and semi-permanent bridges are included.

Area of Green Land refers to the total area occupied for green projects at the end of the reference period, including park green land,, protection green land, Square green space, green land attached to institutions, and the area of green space located within the built-up area.