

EXPLANATORY NOTES ON MAIN STATISTICAL INDICATORS

Production Capacity of Water Supply refers to the designed overall production capacity of water facilities, covering the four segments of water collection, purification, conveyance, and outflow through trunk pipelines. Increased capacity through transformation and innovation projects is included as well. The capacity is determined mainly on the weakest of the above-mentioned four segments.

Length of Water Supply Pipelines at the Year-end refers to the total length of all the pipelines between the water pumps and the user water meters, excluding pipelines newly installed but not used yet, pipeline in the water factory, and pipeline in the user's buildings.

Annual Volume of Water Supply refers to the total volume of water supplied by water-works (units) during the reference period, including both the effective water supply and loss during the water supply.

Consumption of Water for Residential Use refers to water consumption of households for daily life and water consumption of public service facilities. The latter refers to water consumption for urban public services, including the consumption of government agencies and public institutions, military barracks, public facilities, wholesale and retail outlets, restaurants, hotels, and other units providing public services. Household water consumption refers to consumption of water for daily life of all households within the boundary of cities, including households of urban residents and farmers, and public water supply stations.

Coverage Rate of Urban Population with Access to Tap Water refers to the ratio of the urban population with access to tap water to the total urban population. The formula is:

$$\text{Coverage of urban population with access to tap water} = \frac{\text{Urban population with access to tap water}}{\text{Urban population}} \times 100\%$$

Length of Gas Pipelines refers to the total length of pipelines in use between the outlet of the compressor of gas-work or outlet of gas stations and the leading pipe of users, excluding pipelines within gasworks, delivery stations, LPG storage stations, refilling stations, gas-mixing stations and supply stations.

Volume of Gas Supply refers to the total volume of gas provided to users by gas-producing enterprises (units) in a year, including the volume sold and the volume lost.

Coverage Rate of Urban Population with Access to Gas refers to the ratio of the urban population with access to gas to the total urban population at the end of the reference period. The formula is:

$$\text{Coverage rate of urban population with access to gas} = \frac{\text{Urban population with access to gas}}{\text{Urban population}} \times 100\%$$

Length of Paved Roads at Year-end refers to the length of roads with paved surface including bridges and tunnels connected with roads by the end of the year. Length of the roads is measured by the central lines for vehicles for paved roads with a width of 3.5 meters and over, including roads in open-ended factory compounds and residential quarters.

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.

Length of Urban Sewage Pipes refers to the total length of general drainage, trunks, branch and inspection wells, connection wells, inlets and outlets, etc.

Daily Disposal Capacity of Urban Sewage refers to the designed 24-hour capacity of sewage disposal by the sewage treatment works or facilities.

Number of Vehicles under Operation at Year-end refers to the total number of vehicles under operation by public transport enterprises (units) at the end of the year, based on the records of operational vehicles by the enterprises (units).

Area of Gardens and Green Areas refers to the total area occupied for green projects at the end of the reference period, including park green land, residential area green land, subsidiary green land of the units, protection green land, production green

land, roadside green land and scenic forest land.

Park Green Area refers to green areas open to the public for amusement and rest with the facilities of amusement, rest and services. Its function includes perfecting ecology, beautifying landscape, and preventing and reducing disaster. Park green areas include comprehensive park, community park, topic park, belt-shaped park and green area nearby street. Total areas of comprehensive park, topic park and belt-shaped is the area of park.

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).

Industrial Waste Water Meeting Discharge Standards refers to volume of industrial waste water discharge which, with or without treatment, reaches national or local standards with regard to all pollutants.

Ratio of Industrial Waste Water Meeting Discharge Standards refers to percentage of industrial waste water meeting discharge standards over total industrial waste water discharge. It is calculated as:

$$\text{Ratio of industrial waste water meeting discharge standards} = \frac{\text{industrial waste water meeting discharge standards}}{\text{total industrial waste water discharge}}$$

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:

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

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 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.

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.

Industrial Solid Wastes Produced refers to total volume of solid, semi-solid and high concentration liquid residues produced by industrial enterprises from production process in a given period of time, including hazardous wastes, slag, coal ash, gangue, tailings, radioactive residues and other wastes, but excluding stones stripped or dug out in mining - gangue and acid or alkaline stones not included (a stone is acid or alkaline according to the pH value of the water being below 4 or above 10.5 when the stone is in, or soaked by water).

Industrial Solid Wastes 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). Examples of such utilizations include fertilizers, building materials and road materials. The information shall be collected by the producing units of the wastes.

Rate of Utilization of Industrial Solid Wastes refers to the percentage of industrial solid wastes utilized over industrial solid wastes produced (including stocks of the previous years). It is calculated as:

$$\text{Rate of utilization of industrial solid wastes} = \frac{\text{volume of industrial solid wastes utilized}}{\text{industrial solid wastes produced} + \text{stock of previous years}} \times 100\%$$

Industrial Solid Wastes Disposed refers to the quantity of industrial solid wastes which are burnt or placed ultimately in the sites meeting the requirements for environmental protection and not salvaged or recycled (including disposition in the year of those wastes of previous years). The disposition includes landfill (Safe landfills should be conducted for hazardous wastes), incineration, containment spaces, deep underground disposal, backfill in mining pits and disposal at sea.

Industrial Solid Wastes Discharged refers to the volume of industrial solid wastes discharged by producing enterprises to disposal facilities or to other sites. The wastes exclude stones stripped or dug from mining (gangue and acid or alkaline waste stones not included).

The Above-good Air Quality (API) Days API, i.e. the air pollution index, is the abbreviation of Air Pollution Index. API is to simplify the several air pollutant concentrations routinely monitored into a single form of conceptual index value, and to classify and characterize air pollution and air quality, suitable for representing the short-term air quality status and trends of the city. The standard to which the calculation of API grade refers is (GB3095-1996), and the pollutants to be evaluated are only the three -- SO₂, NO₂ and PM₁₀.

The Above-good Air Quality (AQI) Days AQI is the dimensionless index of a quantitative description of the air quality status and is the abbreviation of Air Quality Index. The standard to which the calculation of AQI grade refers is the new ambient air quality standard (GB3095-2012), and the pollutants to be evaluated are only the six -- SO₂, NO₂, PM₁₀, PM_{2.5}, O₃ and CO.