

主要统计指标解释

能源生产总量 指一定时期内一个国家或地区一次能源生产量的总和,是观察全国能源生产水平、规模、构成和发展速度的总量指标。一次能源生产量包括原煤、原油、天然气、水电、核能及其他动力能(如风能、地热能等)发电量,不包括低热值燃料生产量、生物质能、太阳能等的利用和由一次能源加工转换而成的二次能源产量。

能源消费总量 指一定时期内一个国家或地区物质生产部门、非物质生产部门和生活消费的各种能源的总和,是观察能源消费水平、构成和增长速度的总量指标。能源消费总量包括原煤和原油及其制品、天然气、电力,不包括低热值燃料、生物质能和太阳能等的利用。能源消费总量分为终端能源消费量、能源加工转换损失量和损失量三部分。

(1) 终端能源消费量:指一定时期内一个国家或地区生产和生活消费的各种能源在扣除了用于加工转换二次能源消费量和损失量以后的数量。

(2) 能源加工转换损失量:指一定时期内一个国家或地区投入加工转换的各种能源数量之和与产出各种能源产品之和的差额,是观察能源在加工转换过程中损失量变化的指标。

(3) 能源损失量:指一定时期内一个国家或地区能源在输送、分配、储存过程中发生的损失和由客观原因造成的各种损失量,不包括各种气体能源放空、放散量。

能源加工转换效率 指一定时期内,能源经过加工、转换后,产出的各种能源产品的数量与同期内投入加工转换的各种能源数量的比率。该指标是观察能源加工转换装置和生产工艺先进与落后、管理水平高低等的重要指标。

能源消费弹性系数 是反映能源消费增长速度与国民经济增长速度之间比例关系的指标。计算公式为:

$$\text{能源消费弹性系数} = \frac{\text{能源消费量年平均增长速度}}{\text{国民经济年平均增长速度}}$$

电力消费弹性系数 反映电力消费增长速度与国民经济增长速度之间比例关系的指标。计算公式为:

Explanatory Notes on Main Statistical Indicators

Total Energy Production refers to the total production of primary energy by all energy production enterprises in a country or region in a given period of time. It is a comprehensive indicator to show the capacity, scale, composition and pace of development of energy production of the country. The production of primary energy includes that of coal, crude oil, natural gas, hydro-power and electricity generated by nuclear energy and other means such as wind power and geothermal power. However, it excludes the production of fuels of low calorific value, bio-energy and solar energy and the secondary energy converted from the primary energy.

Total Energy Consumption refers to the total consumption of energy of various kinds by material production sectors, non-material production sectors and households in a country or region in a given period of time. It is a comprehensive indicator to show the scale, composition and pace of development of energy consumption. The total energy consumption includes that of coal, crude oil and their products, natural gas and electricity. However, it excludes the consumption of fuel of low calorific value, bio-energy and solar energy. Total energy consumption can be divided into three parts: end-use energy consumption, loss during the process of energy conversion and energy loss.

(1) Volume of End-use Energy Consumption refers to the total energy consumption by the production sectors and the households in a country or region during a given period. It does not include the consumption during the conversion of primary energy into secondary energy and the loss in the process of energy conversion.

(2) Volume of Loss During the Process of Energy Conversion refers to the total input of various kinds of energy for conversion, minus the total output of various kinds of energy in the country or region in a given period of time. It is an indicator to show the loss that occurs during the process of energy conversion.

(3) Volume of Energy Loss refers to the total loss of energy in transportation, distribution and storage and the loss caused by any objective reason in a given period of time. It excludes the loss of various kinds of gas due to gas discharges and stocktaking.

Efficiency of Energy Transformation refers to the ratio of the total output of various kinds of energy products after transformation to the total input various kinds of energy for transformation during the given period. It is an important indicator to show the current conditions of energy transformation equipment, production technique and management.

Elasticity Ratio of Energy Consumption is an indicator to show the relationship between the growth rate of energy consumption and the growth rate of the national economy. The formula is:

$$\text{Elasticity Ratio of Energy Consumption} = \frac{\text{Average Annual Growth Rate of Energy Consumption}}{\text{Average Annual Growth Rate of National Economy}}$$

Elasticity Ratio of Electricity Consumption is an indicator to show the relationship between the growth rate of electricity consumption and the growth rate of the national economy. The formula is:

电力消费弹性系数 = $\frac{\text{电力消费量年平均增长速度}}{\text{国民经济年平均增长速度}}$

发电煤耗计算方法 指电力按当年平均火力发电煤耗换算成标准煤。

电热当量算法 指电力按自身热功当量换算成标准煤。

Elasticity Ratio of Electricity Consumption = $\frac{\text{Average Annual Growth Rate of Electricity Consumption}}{\text{Average Annual Growth Rate of National Economy}}$

Calculation Method of Generation Electricity and Coal Consumption
Electricity is converted into standard coal (SCE) according to the average coal-fired power consumption of the year.

Electro-thermal Equivalent Calculation Method Electricity is converted into SCE according to its own thermal equivalent.