

## Explanatory Notes on Main Statistical Indicators

**Total Energy Production** refers to the total production of primary energy by all energy producing enterprises in the province in a given period of time. It is a comprehensive indicator to show the capacity, scale, composition and development of energy production of the province. 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, solar thermal and the secondary energy converted from the primary energy.

**Total Energy Consumption** refers to the total consumption of energy of various kinds by the production sectors of the economy and the households in a given period of time. It includes the primary kinds of energy such as coal, crude oil, natural gas, hydro-power, nuclear power, wind power, solar power, geothermal power and bio-energy; the secondary kinds of energy and their products which are transformed from the primary energy such as washed coal, coke, coal gas, electricity, heating, and petroleum products; and other kinds of fossil energy, renewable energy and new energy. The renewable energy, including hydro-power, wind power, solar power, geothermal power and bio-energy, refers to the part attained with some given technical means and used for commercial purposes. Total energy consumption can be divided into three parts: end-use energy consumption, loss during the process of energy conversion and energy loss.

(1) End-use Energy Consumption: It refers to the total energy consumption by material production sectors, non material production sectors and households in the province in a given period of time, but excludes the consumption in conversion of the primary energy into the secondary energy and the loss in the process of energy conversion.

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

(3) Energy Loss: It refers to the total of the loss of energy during the course of energy transport, distribution and storage and the loss caused by any objective reason in a given period of time. The loss of various kinds of gas due to gas discharges and stocktaking is excluded.

**Energy Consumption per Unit of GDP** refers to the energy

consumption per unit of Gross Regional Product in a region in the same reference period. The formula is:

$$\text{Energy Consumption per Unit of GDP} = \frac{\text{Total Energy Consumption}}{\text{Gross Regional Product}}$$

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

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

The average annual growth rate of the national economy can be shown by the gross national product, gross domestic product and other indicators, depending upon the purposes or needs. The gross domestic product is used in calculation of the ratio in this chapter.

**Elasticity Ratio of Electricity Production** is an indicator to show the relationship between the growth rate of electricity production and the growth rate of the national economy. Generally speaking, the growth rate of electricity production should be higher than that of the national economy. The formula is:

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

**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:

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

**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:

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