

## 18. ENERGY

### Methodological notes

Data on energy sources have been taken from the producers, importers, exporters and fuel and energy traders. Data on use are obtained from statistical units consuming individual kinds of fuel and energy, from distributors and with calculations.

Balance of solid fuel includes hard coal, brown coal, coke, briquettes.

Balance of gaseous fuels includes natural gas, coke-oven gas, blast furnace gas, oxygen steel furnace gas.

Balance of crude oil and petroleum product includes crude oil, NGL, refinery feedstock, refinery gas, ethane, LPG, gasolines, diesel oil, fuel oils, lubricants, waxes, bitumenes, petroleum coke, other refinery products.

Balance of renewables and wastes includes wood, wood waste, other biomass, municipal solid wastes, biogas, industrial wastes (solid, liquid and gaseous). Hydro energy and wind energy are involved in electricity balance and geothermal heat in heat balance.

### Definitions

**Gross inland consumption** includes primary production (brown coal, lignite, crude oil, natural gas, heat and electricity) and it is modified by recovered products, by balance of imports and exports and by drawing of stocks. It also includes the balance of imports and exports and drawing of the other resources stocks such as hard coal, coke, brown-coal briquettes, diesel oil, gasolines, light and heavy fuel oils, kerosene and other solid, liquid and gaseous fuels.

**Transformation – input** is amount of fuels transformed to obtain derived fuels or electricity and a part of fuels consumed for heat production. The total amount of fuels used in public power, combined heat and power (CHP) plants and heat plants is reported. Autoproducer's fuel consumption for electricity production is reported. There is also included a part of fuels which corresponds to heat sold from autoproducer's CHP plants and heat plants production. Fuels which were used for autoproducer's heat production for own consumption is reported in energy sector or other sectors which covers autoproducer's main activity.

**Transformation – output** is amount of produced fuels and energy obtained by upgrading of other fuels and energy. Individual items of output meet items of transformation – input.

**Exchanges and transfers, backflows** are amount of products which were reclassified to feedstocks or to other products and amount of products returned from petrochemical industry for further processing.

**Consumption of the energy sector** are fuels used by the energy industry to support the mining (mining coal, oil and gas production) or transformation activity.

**Distribution and transmission losses** figure a difference between fuels and energy input into the long-distance transport systems (oil pipelines, gas-lines and public electricity and heat distribution) and output from them (intra-plant losses being a part of consumption are excluded). Well-founded losses caused by depreciation or destruction are included.

**Final consumption** is calculated like:

gross inland consumption

– transformation – input

+ transformation – output

- + exchanges and transfers, backflows
- consumption of the energy sector
- distribution and transmission losses.

**Final non-energy consumption** are presented as energy products used as raw materials in the different sectors, i.e. not consumed as a fuel or transformed into another fuel.

**Final energy consumption** is final consumption minus final non-energy consumption.

**Consumption of fuels and energy** is consumption including charging and operational consumption in the process of generation of electricity and production of heat as well as in the fuel improvement processes. Electricity consumption also includes consumption of energy for pumping.

## Source

All published data are the result of the statistical surveys of the SO SR.

More detailed information can be found in annual publication Energy as well as on the SO SR website in the section Multi-domain statistics – Energy and in the public database of the SO SR DATAcube.