Formation of energy balance data and control of data quality

The modern energy sector is a compound multi-parameter system. In this regard, essential improvement of energy statistics' quality, characterizing activity of the energy sector, assumes particular importance. Indicators system of energy statistics should provide with real description of a situation.

The balance of energy has special value among numerous indicators of energy statistics of Azerbaijan. Being guided by data of energy statistics, the balance of energy shows stocks and flows of all forms of energy within the interconnected registration system, i.e. beginning from the place of origin and up to final consumption. Such balance gives a basis for the careful analysis and can provide with good data coherence.

The balance of energy presents the aggregated material balance, which coordinates balances of different types of fuel and energy in a single whole and is the integrated statistical tool allowing reorganization of large volumes of various data of the energy sector in the form of interrelated tables that are combined by general methodology, indicators, measurement units and classifications.

When working out statistical indicators of balance in Azerbaijan it is carried out analysis of the data obtained from legal entities, its comparison with data of other sources for the purpose to check of their reliability and quality. More than 12 statistical forms characterizing those or that energy products are used on compilation of the energy balance as well as control of reliability of quality by means of comparison of statistical data is carried out. The conducted surveys of natural entities and households also make impact on compilation of an energy balance.

At present, the format of energy balance is conformed to Recommendations of International Energy Agency (IEA), and this format reflects indicators on 23 types of energy products.

Availability of such kind of energy balance gives possibility to assess the state of consumption in energy sector and to make sound decisions on planning of economy.

The State Statistical Committee of the Republic of Azerbaijan compiles energy data annually and publishes in the yearbook "Energy of Azerbaijan", which is available online at <u>www.stat.gov.az</u>.

The balances allow designing of various indicators of consumption of energy resources. So, 2014 energy balance of Azerbaijan reflected such data as: energy intensity of GDP, power intensity of GDP, energy consumption per capita, electricity consumption per household, specific weight of expenses on electricity from total income of household, share of per capita expenses on electricity from total income of household, emissions from industrial enterprises into the atmosphere, energy dependence and other data characterizing energy efficiency for several years. The current dynamics and schedules of energy resources give the characteristic of the state of energy of the country.

Standards of classification of energy resources as well as the exact values of coefficients of recalculation between various energy units corresponding to peculiarities of national economy, namely extracting branches and energy are used on compilation of energy balances in Azerbaijan.