The development of energy policy and strategy of Azerbaijan

Speaker - Otel Huseynov, Senior consultant for the Department of Energy Policy and Fuel and Energy Resources
The purpose and functions of the energy policy

External Policy
- To show the role and importance of Azerbaijan as a major producer of energy resources, and to develop it;
- To attract foreign investments for the development of new hydrocarbon resources;
- To create reliable energy corridors to access world markets;
- To participate in international energy projects;
- To ensure the exchange of energy using the SWAP method;
- To ensure energy security, peace and stability in the region.

Internal Policy
- The most effective use of natural energy and fuel resources and the potential of the energy sector for economic growth and improvement of the life quality of the population;
- Development of alternative energy;
- Rehabilitation and development of gas and electricity supply systems in the regions of the country;
- Creation of modern infrastructure and bringing the existing facilities into compliance with international standards.
Priorities of Energy Policy

State Policy Priorities

Energy Security

Economic (budget) Efficiency of Energy Industry

Energy Efficiency of the Economy

Environmental Safety of Energy Industry
Energy Efficiency of the Economy

Azerbaijan possesses considerable reserves of energy resources and a powerful fuel and energy complex, which is the basis of economic development and an instrument of internal and foreign policy. Azerbaijan treats carefully its own natural resources.

Naturally, Azerbaijan has ensured its own energy security.

To ensure the long-term sustainability of all types of energy to the economy and population of the country energy policy for the efficient use of energy resources is carried out. Their effective use creates necessary preconditions for leading the country's economy towards sustainable development, ensuring the welfare and improvement of living standards.

- Reduction of the unit costs of production and use of energy resources due to rationalisation of their consumption;
- The use of energy-saving technologies and equipment in all sectors of social and economic life;
- The fullest and the most effective use of local fuel and energy resources, including renewable energy.

Pursuant to this objective the following were developed:

- A draft of “The State Programme for the rational use of energy resources and energy efficiency of final consumers (20015-2020)”, and
- Draft legislation to implement some of the activities provided by the “Law on the use of energy resources”.
The potential of hydrocarbon resources in Azerbaijan

- Today the approved potential of hydrocarbon resources of the country is estimated at 2 billion tonnes of oil and 2.6 billion tonnes of cubic metres of gas.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Measuring unit</th>
<th>Fact</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2013</td>
<td>2014</td>
</tr>
<tr>
<td>Oil production (with condensate)</td>
<td>Thousand tonnes</td>
<td>43315.0</td>
<td>42023.0</td>
</tr>
<tr>
<td>Gas production</td>
<td>mln.m³</td>
<td>29451.0</td>
<td>29617.0</td>
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</tbody>
</table>

- Currently Azerbaijan has a generation capacity of 7109 MW. Annual generation amounts to 18-20 billion kWh. Energy complex not only meets a growing demand for electricity in Azerbaijan, but also has a great export potential in the range of 4 billion kWh.
## The potential of the renewable energy resources in Azerbaijan

<table>
<thead>
<tr>
<th>The type of potential</th>
<th>Capacity, MW</th>
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</thead>
<tbody>
<tr>
<td>Solar energy</td>
<td>&gt;5000</td>
</tr>
<tr>
<td>Wind energy</td>
<td>&gt;4500</td>
</tr>
<tr>
<td>Bioenergy</td>
<td>&gt;1500</td>
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<tr>
<td>Geothermal energy</td>
<td>&gt;800</td>
</tr>
<tr>
<td>SHPP</td>
<td>&gt;350</td>
</tr>
</tbody>
</table>
Key measures to improve efficiency

- Legal Framework
- Governance
- Investments
- Technology
- Education

Measures to improve efficiency
Legal and Institutional frameworks for energy planning

- The main state programmes for the development of fuel and energy complex
  
  - 2003 - National Program of the Azerbaijan Republic on sustainable socio-economic development on the environment (Decree #1152, 18.02.03);
  - 2004 - The State Program on use of alternative and renewable energy sources in the Azerbaijan Republic (Decree #462, 21.10.04);
  - 2005 - State program on development of fuel and energy complex for 2005-2015 (Decree #635, 14.02.05).

- Regulatory Documents for energy saving and improvement of energy efficiency in energy sector in general
  
  - Law of the Azerbaijan Republic on the use of energy resources, 1996;
  - Law of the Azerbaijan Republic on energy industry, 1998;
  - Law of the Azerbaijan Republic on gas supply, 1998;
Energy Planning

Key stakeholders participating in the energy planning process

Governmental agencies
- Ministry of Energy;
- Ministry of Economy and Industry;
- Ministry of Finances;
- State Statistical Committee;
- State Agency of Alternative and Renewable Energy Sources.

Energy companies
- SOCAR;
- State OJSC “AzerEnergy”;
- OJSC “AzerShyg”;
- Azerbaijan International Operating Company (AIOC) – consortium.
Activities in the area of Energy Statistics

- Brief overview

- Legal and normative framework of energy statistics;
- Prerequisites for the development of energy statistics;
- Activities and development targets of energy statistics;
- Policy for the development of energy statistics;
- Measures to improve energy statistics;
- The system of indicators in energy statistics;
- Azerbaijan's experience in classification of energy products;
- The practice of Azerbaijan in the conversion factors for energy products;
- Areas of improvement of energy statistics in the Republic of Azerbaijan.
Legal and normative framework of energy statistics

Basic examples from the Law of the Republic of Azerbaijan on State Statistics

All legal entities and their representative offices or branches as well as individuals operating in the territory of the Azerbaijan Republic are obliged to provide all necessary statistical information for the surveys in a certain scope at a certain time to the state statistics bodies. Information shall be provided on the basis of free official statistic reports or in electronic form (http://www.stat.gov.az/laws/law_en.pdf).

The independence of statistics. Governmental and non-governmental organisations don’t have the right to interfere with the exercise of powers of state statistics bodies, not to apply pressure on the staff of statistical agencies when fulfilling their tasks.
• **Legal and normative framework of energy statistics**

❖ **Access to administrative data.**

All state and local authorities must provide access to the State Statistical Committee of Azerbaijan Republic to statistical information collected, processed and stored in the respective domains, particularly in the registries and other data files, to the extent that is necessary for the production of statistical information, thereby avoiding to apply ressure on these bodies. The access to the data shall be provided to the State Statistics Committee in due time according to the Statistical Work Programme.

❖ **Links with other institutions Связи с другими учреждениями**

State statistical agencies must work closely with other government agencies, thereby providing them with regular information about the results of their work, on the state of the reporting system, economic and social processes in the country and regions.
Prerequisites for the development of energy statistics

- Successful implementation of the national oil strategy has created the conditions for the implementation of transnational projects and this, in turn, gave the prerequisites for a comprehensive and dynamic development of the energy sector, which entailed certain changes in the national economy.

- This required that the official statistics keep with the changes, be organised in line with international standards, and be able to prepare the national energy balance.

- Azerbaijan's integration into European space, its growing impact on the energy market, the country's transformation into a reliable and alternative supplier of energy resources to the European countries have created the preconditions for the implementation of international standards in the field of energy statistics.
Policy for the development of energy statistics

To implement the energy policy, the following state authorities function in the country: Ministry of Energy, State Oil Company, State Company for the Alternative and Renewable Energy Sources, Open Joint Stock Company "Azerenergy“, and Open Joint Stock Company "Azerishyg“.

For the compilation of energy statistics, a division for energy statistics ahs been organised with the Department for Industrial and Construction Statistics of the State Statistical Committee of Azerbaijan Republic.

In the State Programme for the “Improvement of the official statistics in the Azerbaijan Republic for 2013-2017” which determines the long-term strategy for statistics, energy activities amounted to 2.6 % out of the envisaged 78 events in the real sector.
• Activities and development targets of energy statistics целы

❖ Examples from the State Programme:

➢ Activity 1. Development of methodological guidelines on energy statistics. *(Improvement of energy statistics taking into account the nature of the national energy statistics, sources, survey methods, definitions and explanations used in this area).*

➢ Activity 2. Development and improvement of the national energy balance in accordance with international standards. *(Adjustment of indicators of energy statistics in accordance with international standards, specifically aimed at the comparison of the indicators of the national energy balance with those of the developed countries)*

➢ Activity 3. Revision of the official forms of statistical reporting on energy, analysis of existing indicators, development of methodological guidelines. *(Compliance of the existing reporting forms and energy statistics methodologies with international standards, improvement of indicators, existing reports and methodologies)*
Activities and development targets of energy statistics

Examples from the State Programme:

- **Activity 4.** Improvement of the system of main indicators of energy statistics (*Harmonising the indicators of national energy statistics with international indicators*)

- **Activity 5.** Creating of statistics on alternative and renewable energy sources (*Receiving statistical information on alternative and renewable energy sources*)

- **Activity 6.** The statistical publication entitled "Energy Sector of Azerbaijan" (*systematization and analysis of statistical information in energy sector, the provision of information to the national and international organisations and other users*)
• **Policy for the development of energy statistics**

➢ State Statistical Committee of Azerbaijan Republic is the main performer and coordinator of the State Programme which reports to the Government and the President of the Azerbaijan Republic on its implementation.

➢ The works on energy statistics provided under this Programme have already been implemented, and the next five-year programme which is now being discussed provides for measures to improve the methodology and indicators of energy statistics.

• **Measures to improve energy statistics**

➢ The experts of the State Statistical Committee of Azerbaijan Republic participated in many events organised by such international organisations, as the UN, IEA, etc.

➢ Over the past five years, the State Statistical Committee of Azerbaijan Republic adopted 25 decisions in the field of energy statistics, including those related to the energy balance.

➢ Since 2007 the energy balance has been compiled in accordance with the Eurostat structure, and since 2011 – based on the requirements of the "International Recommendations for Energy Statistics" (IRES), adopted by the UN Statistical Commission.
• **The system of indicators in energy statistics**

- As a result of summarizing the methodologies of the United Nations, International Energy Agency, European Union and other international organisations, the State Statistical Committee of Azerbaijan has prepared the "System of energy statistics indicators."

- The main purpose of the system of indicators was to determine the scope of coverage of energy statistics indicators, their definition in accordance with the standards of the IEA, UN, EU; to prepare calculation methodology, and to obtain the necessary information for compilation of the national energy balance.

- The system of indicators consists of two sections: the list of the main energy statistics indicators and description of the main energy indicators.

- The system of indicators provides the basis for the preparation of relevant questionnaires and metadata systems and development of respondents' understanding of their meaning which ultimately serves to improve the quality of the data obtained.

• **Azerbaijan's experience in classification of energy products**

- State Statistical Committee has developed and implemented a national version of the Classification of energy products based on the "International Recommendations for Energy Statistics" (IRES).

- Classification of energy products provides a data comparison on international level, describes the connection between different classifications used in the country, and has good possibilities for the transition codes (transient keys).

- The Classification contains list of energy products, their structure, the description and main features and differences of similar products.
Areas of improvement of energy statistics

The following measures aimed at the improvement of existing energy statistics and investigating the new areas in this field were envisaged in the Republic of Azerbaijan for the upcoming years:

- The survey on energy efficiency in households for the statistical evaluation of energy dependence in individual sectors of the economy and for the improvement of energy efficiency indicators;
- The development of a methodology for the statistical evaluation of the effective use of natural resources and energy sources due to new technologies, covering statistical indicators of "green economy";
- The continuation of the consumption surveys of energy products by individuals and households to assess the consumption sector of the energy balance.
Energy efficiency policy framework of the country (it is envisaged)

- Effective implementation of energy efficiency measures and programmes
- Defining the education as a priority
- Increasing efficiency and reducing losses on all stages from production to consumption
- Development of information systems and the organisation of monitoring, control and measurement systems
- Assessment of energy efficiency potential in all sectors and utilising this potential
- Identifying objectives in the direction of compliance with the EU standards
- 20% saving by 2020
Спасибо!

Thank you!

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INOGATE Technical Secretariat and Integrated Programme in support of the Baku Initiative and the Eastern Partnership energy objectives