

****FINAL REPORT****

**NATIONAL ENERGY STATISTICS ACTION PLAN FOR THE
REPUBLIC OF TAJIKISTAN**

Produced with the support of the INOGATE Programme

**“INOGATE Technical Secretariat and Integrated Programme in support of the
Baku Initiative and the Eastern Partnership Energy Objectives”**

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1. INTRODUCTION

A unified approach to activities related to energy statistics is needed for various reasons – it helps policy makers in the decision making process, reduces administrative workload when collecting and supplying data, reduces efforts of organisations in explaining differences between different datasets, helps general public to understand the energy situation in their own country, as well as in other countries. Detailed, complete, timely and reliable statistics are essential to monitor the energy situation both at the country level and at the regional level.

At the beginning of 2012, the EU launched a technical assistance project, which addresses, among other areas energy statistics in the countries in the INOGATE area (Belarus, Moldova, Ukraine, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan, and Tajikistan).

The assistance in the field of energy statistics will be implemented during the following 2,5 years through the ITS project (*INOGATE Technical Secretariat and Integrated Programme in support of the Baku Initiative and the Eastern Partnership Energy Objectives*) and its specific Component D: *Support to statistical cooperation*.

The main aim of the ITS project and Component D is to assist the Partner Countries (PCs) in developing their institutional frameworks for energy statistics, in order to harmonise them with international standards, and to improve the methodologies applied in the data collection and compilation of energy statistics, energy balances, energy prices and energy (efficiency) indicators.

One of the main activities of the ITS project is the development of Energy Statistics Action Plans (ESAP) and their adoption by the Partner Countries (PCs). ESAPs will be used as a guideline for implementing certain activities under the project, as well as for monitoring their success. The Energy Statistics Action Plans consist of the following main segments:

- evaluation of the current status of energy statistics and energy balances and creation of the Energy Statistics Country Profile;
- assessment of the required measures and activities needed to streamline the efforts towards the alignment of energy statistics with the rules and procedures applicable in the relevant international organisations (IEA) and in the EU (EUROSTAT);
- selection of the specific country measures and activities to be supported by the ITS project through the technical assistance aimed to increase transfer of know-how and skills and the creation and strengthening of the institutions involved in energy statistics system organisation. In addition to the above mentioned, the ITS project will implement several horizontal activities involving INOGATE countries (workshops, conferences, study tours, networking) which will complement the country specific activities and be synchronised with them.

The Energy Statistics Action Plans refer mostly to the ITS project period, but the ITS experts have also included suggestions for the period after the project closure.

The Energy Statistics Action Plans envisage an active participation of the PCs' relevant institutions in implementing the activities proposed by the ITS project, as well as in monitoring the success of the project.

2. CONCEPT AND METHODOLOGY

In order to develop the Energy Statistics Action Plan in each PC, the ITS experts responsible for the implementation of *Component D: Support to the statistical cooperation*, have developed and applied a uniform methodology based on the principles of equality of all the PCs and on the optimum usage of the resources needed for the implementation of specific activities. This means that the ITS experts have tried to shape the implementation of the activities in the following 2,5 years in such a manner that it provides maximum achievable results.

The methodology comprises the following steps and tasks:

- to assess the institutional framework (legal regulation and institutional organisation) for energy statistics;
- to review reporting systems and the energy data collected from the sources that were made available by bureaus of statistics and other responsible institutions in the PCs, as well as from other relevant available sources, such as the publications of the IEA , the UNSD, and from sources of official energy statistics; and to check and verify findings from other sources (including other departments of bureaus of statistics, ministries, agencies and/or other entities involved in monitoring and forecasting energy data);
- to evaluate uniform surveys prepared and submitted by the ITS experts to each PC, to identify gaps in data collection and in the applied procedures and methodologies according to IEA requirements, to develop benchmarks for specific segments of the energy statistics system and to identify specific groups and the level of development;
- to propose concepts and methodologies for the establishment of a reporting/surveying systems, compilation, aggregation and dissemination of the energy data in accordance with the assessment of each PC's actual capacity, in order to enable the synchronisation and harmonisation of time schedules for specific activities in other PCs;
- to create Energy Statistics Action Plans proposals for each PC, referring to the period of the following 2,5 years of duration of the ITS project and based on a uniform list of specific tasks and applicable measures that are required to overcome an identified gap in all the PCs – both in advanced countries and in those lagging behind the process;
- to estimate the technical, financial and human resources needed to overcome gaps and missing statistics and to set priorities for further actions and activities supported by the ITS project.

The main areas of cooperation between ITS project and PCs will be the implementation of the specific activities, which fall into the scope of the following key actions:

- Legal and institutional framework strengthening,
- Development of a reporting system based on international (IEA/ EUROSTAT) standards,
- Energy balances compilation and submission of the questionnaires to the IEA,
- Development of a reporting system for monthly/quarterly energy statistics,

- Development of a reporting system on energy prices,
- Development of a reporting system on energy and energy efficiency indicators.

This Energy Statistics Action Plan is based on the common efforts between ITS expert team and Tajikistan representatives aimed to define the sequence of needed actions and to set the priority actions, which will provide the maximum and the most efficient contribution to the progress toward harmonisation of Tajikistan statistics with international standards.

The ITS expert team had developed the draft proposals for ESAPs, which had later been sent to the relevant institutions in the Partner Countries in order to receive their feedback and opinion on the proposed activities, as well as their suggestions for further ESAP improvements. Suggested comments from PCs were additionally discussed and were integrated into the final Energy Statistics Action Plan.

3. ENERGY STATISTICS COUNTRY PROFILE

3.1. Legal and institutional framework

The Statistical Agency under the President of the Republic of Tajikistan (TAJSTAT) is a governmental body in the area of data collection, statistical policy and economic analysis and its activities are under the President of the Republic of Tajikistan. The Statistical Agency is administratively an autonomous institution. It is responsible for the population census, household surveys, demographic statistics and a wide range of economic statistics involving surveys in enterprises, prices reporting, international trade, international trade and national accounts, government finance, agricultural, labour and social statistics. The National Bank of Tajikistan compiles monetary data.

The legal framework for statistics data collection and dissemination is based on the *Law of the Tajik Republic on the State Statistics* (No 588, dated 12 of January 2010) which establishes independence of the Statistical Agency and guarantees confidentiality of data provided by the individual statistical units. The Law further obliged the Statistical Agency to develop statistics according to international methodological recommendations and to provide objectivity and integrity of statistics. The measures that the Statistical Agency intends to implement with an aim to enhance the quality of statistics are described in a *Multi-year Integrated Statistical Programme*.

Total number of persons employed in the head office in Dushanbe, the main computing centre and local offices amounts 629. The primary data are collected in the local offices, then it is forwarded to the regional offices and ultimately to the main computing centre. The subject matter divisions in the central office supervise the statistics system operation.

The data is prepared in accordance with the Statistical Programme, which was determined by the Government of the Republic of Tajikistan and also the catalogue of publications. The main publication of the Statistical Agency, *Socio-economic situation*, which includes the latest data for the month and short elaboration for the month, is sent to the President, Government, the

ministries and agencies. The mentioned publication is available to the public and is published on the 12th of the month, for data referring to the previous month. The Statistical Agency also publishes annual publications “Statistical Yearbook of the Republic of Tajikistan”, “Regions of the Republic of Tajikistan”, “Tajikistan and CIS Countries”, “Tajikistan in Numbers”, “Material and Technical Support of Tajikistan”, “Foreign trade of the Republic of Tajikistan”, “Industry of the Republic of Tajikistan” and a series of thematic publications.

The Law of the Republic of Tajikistan on the State Statistics is applied to all statistical units and subjects of the official statistical accounting. Statistical units include natural persons and legal entities, individual entrepreneurs, affiliates and representative offices of foreign legal entities, irrespective of the organisational-legal form, active at the territory in the Republic of Tajikistan.

The Law defines that the Statistical Agency is entitled to:

- obtain statistical data in the defined volume and period, free of charge, from statistical units and subjects of official statistical accounting and in accordance with the procedure established by the legislation of the RT, including data composing commercial and state secrets;
- request data from all kinds of sources, including departmental register and information databases;
- conduct statistical observations among population;
- check reliability of the statistical data, eliminate discrepancies in cases where they are revealed;
- and other.

The Law defines that the State Statistical Register is a tool of statistical accounting and it contains an obligatory list of administrative and primary statistical indicators, which characterises the activity of statistical units according to the Unified system of technical-economic and social information classifications and coding. The authorised agency is obliged to maintain the State Statistical Register.

The Law itself does not specify any activities related with energy statistics. The basis for energy statistics lies in the *Multi-year Integrated Statistical Programme*, which was adopted in the year 2005. The Programme is based on the recommendations of the IMF and other consultants. The Programme defines among other actions, implementation of specific activities, which are related to the surveys on energy consumption in establishments. Such surveys have not been conducted since 1990. The Programme assesses that costs for such surveys (single) amount to 306,000 USD yearly.

Currently, the new National Strategy for the Statistics Development 2012 – 2016 is under implementation. It includes study of the methods needed for Tajikistan’s energy balance development: consulting, financial services, organisation and conduction of the surveys.

The Statistical Agency is obliged to disseminate statistical information according to the publication date and metadata.

There is no division in Statistical Agency, which is obliged to work with energy statistics. The main reason for such situation is the lack of finances in the budget and recent reduction in the number of staff of the Statistical Agency.

3.2. Capacities and capabilities in energy statistics systems

Due to the lack of capacities, no person is allocated to work only with energy statistics.

In the central office of the Statistical Agency, data on energy statistics is collected by two departments: the Department of Industry Statistics and Construction Investments (production) and the Department on Trade and Services (export, import and consumption). Only two persons in the Agency, two in the Main IT Centre and one in each of the local statistical bodies (13 districts, 3 regions and Dushanbe city) deal with the energy statistics. They deal with many other statistical activities.

3.3. Energy profile of the Republic of Tajikistan¹

PRODUCTION

According to the energy balance for 2009 (IEA source) total primary energy production amounts 1502 ktoe, 90 percent of total production belongs to hydropower, 6 percent to coal and peat, while crude oil and natural gas production amounts 4 percent.

IMPORT AND EXPORT

In 2009, Tajikistan net imports of primary energy amounts 817 ktoe, main imported energy forms being oil and natural gas with a share of 58 and 40 percentages respectively. Tajikistan exports about 365 ktoe of electricity. Total primary energy supply (TPES) amounts 2318 ktoe.

ENERGY TRANSFORMATION

In 2009, electricity production in HPPs amounts 1359 ktoe and in CHP plants 28 ktoe. CHP plants produce 86 ktoe of heat annually. IEA's energy balance registers existence of an oil refinery. TAJSTAT reported that there are two oil refineries in Tajikistan.

ENERGY CONSUMPTION

Total final energy consumption (TFC) amounts 1989 ktoe, the largest share in TFC has electricity consumption (39 percent). It is followed by oil and natural gas consumption with a share of 25 and 7 percent respectively, coal and peat consumption is represented with 5 percent while other energy forms have shares less than 4 percent.

¹ http://www.iea.org/stats/balancetable.asp?COUNTRY_CODE=TJ

Consumption structure according to the same source (IEA) is the following: industry sector uses 27 percent, transport sector 5 percent, while other sectors consume 68 percent of TFC.

3.4. Review of available methodologies applied in the process of collecting, elaborating and processing energy statistics data

The TAJSTAT delivered the set of documents which describe the activities and results related to the energy data reporting system to the ITS expert team. Following forms for energy data collection were received:

- **Form No. 1-P (monthly) - Urgent report on production in industrial enterprises**

The form serves to collect data on the volume of production expressed in monetary units excluding VAT and excise taxes, delivered volume (to CIS countries and other countries), number of the persons employed and remaining balance of products. The form is submitted on a monthly basis.

More than 900 enterprises submit the monthly reports to TAJSTAT using this form.

- **Form PE – Report from power plants managed by non-industrial organisations (annual)**

This form is filled in by non-industrial organisations, which operate the power stations. The form is submitted on the 25th of January. The form contains questions related to power plant capacities and generated electricity.

The code used for the classification of power plant capacity is SOEI 0214, and code used for the classification of electricity production in SOEI 0246.

- **Form No. 6-TP (Hydro) (annual) – Report on the performance of hydropower plants**

The form contains questions related with installed, available and operating capacities, average number of operating hours during the reporting year, limited capacities, data on storage capacities and data on plant operations (maximum load, generated power, energy consumption and others). This form must be submitted by power plants to the higher authorities on the 20th of January and to Statistical Agency on the 5th of February.

- **Form No. 6-TP (Heat) (annual) – Report on the performance of the thermal power plants**

This form must be submitted by the thermal power plants to the higher authorities on the 20th of January and to the Statistical Agency on the 5th of February. This form contains questions related to the general data of a TPP (installed capacities, available capacities, maximum load of thermal capacities and electrical capacities, and others), operating data, data on fuel equivalent consumption for electricity and heat supply and fuel balance.

- **Form No. 24 (Energy) – Electricity balance, description of technologies and report on the power plants’ performance**

This form is submitted annually (on January 7) from the independent enterprises irrespective of the type of ownership. The form is submitted to the statistical office at the location of the enterprise and to their higher authority.

The form contains questions on electricity supply and consumption. Electricity supply includes own production and/or delivered electricity. The consumption of electricity includes specification of consumption in the technical processes (drying, heating, electric welding, etc.) by electrical motors, lighting and auxiliary consumption. The form includes also questions about losses in industrial networks and others.

About 1,400 industrial enterprises (mining and manufacturing industry, including hydro and thermal power plants) submit the reports (more exactly data on electricity consumption) in the given forms to the Statistical Agency.

The electricity supply to other consumers includes specifications of consumption for lighting of households in rural and urban areas, streets, water supply system and sewage system, construction, and to others types of services, transport (trolleybuses), oil and gas pipelines.

Statistical Agency collects following forms for the reporting of energy data:

- **Form No. 4-SN (Reserves) (monthly) - Report on stocks and fuel consumption**
- **Form No. 4-SN (annually) - Report on stocks and fuel consumption (all fuel types)**

This report is submitted by enterprises and it provides data on supply, consumption, transfers and stocks of all fuels types.

- **Form No. 11-SN - Report on the results of fuel, heat and electricity consumption**

This form is supposed to serve as a template for the new form, which will be used as a basis for the implementation of target Programme “Energy saving in Tajikistan”. It specifies which types of works use energy resources, in which volumes; and what is planned and actually consumed in each enterprise and total in the country.

In the submitted questionnaire, TAJSTAT reports that it does not collect nor report the following data:

- data on production of secondary energy forms;
- data on stocks, aviation bunkers;

The main source of data on the exports and imports of goods is the customs declaration, **form No. TD-1**. The customs authorities provide the report on export and import of goods, when the goods are crossing economic territory of the country. Statistical Agency (Tajstat) receives aggregated data from Custom Service of the Republic of Tajikistan on monthly basis (5th or 6th day of the month). The values are expressed in thousand US dollars as follows:

- for each partner country;

- total for whole country;
- for groups of goods (for 2 digits TN EEA) or for individual products, they are – flour, wheat, cotton fibre, petroleum products, aluminium, alumina, fruit and vegetables, alcoholic and non-alcoholic beverages;
- annual corrected data are received according to 4 digits of TN EEA in the month of April the following year.

The second source of data on international trade are:

- data of the statistical form No. 8 VEC (goods) which is delivered to the Statistical Agency on the 5th day of every month,
- data on export and import of electricity delivered by the holding company “Barki Tojik” and on import of natural gas by company “Tajikgazservis”;
- at the end of the year, after consultation with partners and after the prices have been updated with official reports on inflation and exchange rates, the companies make adjustments to the volume and value of electricity imported and exported for each month of the year, cumulatively.
- The Agency publishes the data in a monthly report “On the socio-economic situation of the Republic of Tajikistan” and every year in the statistical publication “External Economic Activity of the Republic of Tajikistan” and in the “Statistical Yearbook”.

3.5. Energy balances compilation and their submission to the IEA

The TAJSTAT develops balances for four energy forms: petroleum products, coal, natural gas and electricity. Each balance is represented with a structure, which corresponds mainly to the following format: production inside the country and imports and distribution including consumption of fuel and energy, exports and available resources.

The ITS expert team received the compiled energy balances for the period 2004 – 2010. A more detailed structure of each commodity balance is presented in the following paragraphs.

- Petroleum products production and distribution balance (tonnes):
 - ✓ Resources (produced, imports: from CIS and non CIS countries);
 - ✓ Consumption (transport sector, households, industry, agriculture, transport, construction, other sectors and private sectors);
 - ✓ Exports (to CIS countries and to other countries).
- Natural gas production and distribution balances (mil m3):
 - ✓ Resources (produced, imports: from CIS and non CIS countries);
 - ✓ Distribution (network supply: households, public services, other, losses);
 - ✓ Consumption (transport sector, households, industry, agriculture, transport, construction, other sectors and private sectors);

- ✓ Exports (to CIS countries and to other countries).
- Coal production and distribution balances (tonnes):
 - ✓ Resources (production and imports: from CIS countries and from other countries);
 - ✓ Distribution (industry, agriculture, transport, construction, other sector, private sector);
 - ✓ Exports.
- Electricity balance on production, losses and consumption (mln kWh):
 - ✓ Resources (production and imports: from CIS countries and from other countries);
 - ✓ Distribution (transport, public living needs, industry, agriculture, construction, other sectors, reserves, private sector);
 - ✓ Exports.

The Statistical Yearbook (2011) is based on the data received from enterprises and companies on the production according to the form No. 1-P and others.

The Statistical Agency (TAJSTAT) annually publishes statistical balances on the production and distribution of specific materials and energy resources for the whole country in the statistical publication – “Material and technical support of Tajikistan”.

3.6. Reporting on monthly energy statistics

The TAJSTAT compiles only monthly electricity data.

3.7. Reporting on energy prices

The TAJSTAT does not report energy prices. The electricity sector is managed by Barki Tojik OJSHC, a 100% state-owned vertically integrated energy company, which is responsible for all state-owned assets in the electricity sector: all electric power plants (mainly hydro power plants), transmission networks, and three regional distribution companies. Due to the *de facto* monopoly of the Barki Tojik, except for the isolated region of Pamir, the third party access to a network is not currently an issue in Tajikistan. All activities related to electricity production, transmission and distribution, with the exception of self-generation are subject to licensing. Electricity tariffs are differentiated for the following major end-consumer groups: industrial consumers, agricultural producers, budget-funded organisations, pumping stations and electric transport, electric boilers for building heating and households.

3.8. Energy and energy indicators reporting

The TAJSTAT reports only Millennium Development Goals, PRSP (Document on the Fuel Poverty Mitigation) and NDS (National Development Strategy) indicators.

4. ENERGY STATISTICS ACTION PLAN 2012 - 2015

The Energy Statistics Action Plan for Tajikistan is presented in the following paragraphs as a sequence of integrated horizontal and vertical activities planned for the period 2012 – 2015. All proposed activities are specified in such a manner that they reflect Tajikistan’s demands for timely and reliable energy statistics. The activities that are suggested and planned to be supported by the ITS project, through the particular Technical assistances (ITS TA), are specially highlighted. A list and a short explanation of all applicable ITS Technical assistances can be found in Annex 2.

In addition to the vertical activities mentioned above, the main stakeholders in energy statistics will be invited to actively participate in other ITS project activities common for all the Partner Countries (PCs), such as workshops, conferences, study tours, networking and others (horizontal activities), that complement the ITS technical assistances. It is important to mention that Tajikistan and its responsible stakeholders are expected to ensure the availability of appropriate staff, to support their active participation in the implementation of this Action Plan, and thereby to ensure the sustainability of the initiated processes.

The main goal of all these activities is to increase capacity building in the PCs and to establish a reliable and timely energy statistics system available to the growing number of energy statistics users.

Implementation plan and timelines presented in table 5-2, Chapter 5, provide a schedule of the activities, which are to be accomplished until 2015.

The ITS expert team developed a set of indicators for monitoring of the implementation of the ESAPs during the period 2012 – 2014. The indicators are listed in the table in Annex 3 and will be filled out at the beginning of the implementation phase and at the end of each project year (2013, 2014). TAJSTAT and ITS expert team will complete the table jointly.

Based on the energy statistics system assessment presented in the previous chapters, the ITS expert team proposes to Tajikistan the implementation of a set of activities, which will contribute to the improvement of energy data quality and capacity building. The main results of the ITS assistance in Tajikistan will be energy and commodity balances published on the official website free of charge.

4.1. Key area 1: Legal and institutional framework strengthening

The first ITS expert on-site mission to Tajikistan confirmed that Tajikistan is faced with a very weak institutional organisation for energy statistics. Tajikistan commits itself to improving energy statistics, but organisation and lack of funding is the main barrier to progress. *The Law on the State Statistics* clearly defines the duties and obligations of the statistical units (natural and legal persons, entrepreneurs and others), which need to provide statistical data to TAJSTAT in the defined volume and period, and free of charge. Therefore, there is no need for intervention in the *Law on the State Statistics*. The following activities for Tajikistan are proposed:

- **Development of the program for data collection and compilation**

The aim of this activity is creating a proposal for the inclusion of specific activities related with energy statistics in the following annual *Statistical Work Programme*.

The proposal will be based on the detailed analysis of energy flows and of stakeholders involved in the energy system. The proposal will include the lists of the **needed data, methodologies and procedures**, which should be adopted by TAJSTAT in the following period. The proposal will be finalised after discussion with main stakeholders involved in energy statistics, which is planned to be held during the capacity building on institutional relationships (**Activity TA-1.4**).

The implementation of this activity can be supported by the **ITS Technical Assistance (ITS TA - 1.2)**.

- **Improvement of the institutional relationship and capacity building on the institutional organisation for energy statistics**

The aim of developing a much firmer institutional organisation in Tajikistan is to gather all the relevant stakeholders involved in the collection, compilation, standardisation and dissemination of energy statistics. Such organisation will contribute both to the effectiveness of the statistics system and will help avoid the duplication and overlapping of the stakeholders' work.

Effective institutional arrangements are usually characterised by the designation of only one agency responsible for disseminating energy statistics, so that the TAJSTAT as the officially appointed institution for collecting, compiling and disseminating statistics, should take the leading position in the governance of the national statistics system regarding energy statistics. A proper organisation must be based on a clear definition of the rights and responsibilities of all the stakeholders involved in data collection and compilation. The establishment of formalised working arrangements among the involved stakeholders will contribute to a clear, efficient and sustainable governance of the national system of energy statistics.

The ITS project foresees the implementation of two specific regional activities, common for all the PCs that will also be implemented in the other PCs.

The first activity will support the **organisation of a national meeting**, which aims to coordinate the distribution of tasks and capacities within the energy statistics system. This activity will support the establishment of a coordination mechanism within the energy statistics system in Tajikistan to avoid duplication of tasks and responsibilities among main stakeholders and to ensure that work is based on minimum costs and efficient use of resources. This activity also involves the facilitation of the development of a **Memorandum of Understanding (MOU)** for cooperation on energy statistics agreed between the Statistical Agency of the Republic of Tajikistan (TAJSTAT) and other bodies involved in the energy statistics system.

The second activity will include support to a national **meeting, which aims to raise awareness among decision makers, relevant national authorities**, energy data suppliers and users on the importance of available, reliable, timely and transparent energy statistics.

The duration and the time plan for the regional activities listed above are presented in Table 5.3 – Regional activities (RA1– Development/improvement of the Legal and Institutional Framework).

In addition, the TAJSTAT and other responsible statistical bodies have the possibility to additionally implement particular activities under the ITS technical assistance in order to improve the

institutional relationship and increase capacity building on institutional organisation for energy statistics in Tajikistan (**ITS TA-1.3, ITS TA-1.4**). This should in turn result with the establishment of permanent communication and discussions about energy data, and will help to establish concrete relationships between relevant stakeholders involved in the collection, compilation and dissemination of energy data. Particularly, clear relations between the Ministry of Energy and Industry (MEI), joint stock holding company “Barki Tojik” OJSC, Tajiktransgas OJSC, Tajik Aluminium Plant and others should be established. More detailed description of the activities ITS TA-1.3 and ITS TA-1.4 can be found in Annex 2.

The energy sector of Tajikistan includes several main entities. The electric power is the responsibility of the state-owned joint stock holding company Barki Tojik, which entirely controls the production, transportation and distribution of electricity in Tajikistan. Oil and gas production, and development of oil and gas deposits are the responsibility of the State Committee for Oil and Gas. The national gas company TajikGas carries out distribution of natural gas and liquefied petroleum gas in Tajikistan. The State Company Tajiknefteproduct carries out the import and distribution of oil products. The Ministry of Energy and Industry controls the coal-mining sector.

The Tajik Aluminium Plant is the country’s largest electricity consumer.

The Ministry of Economic Development and Trade (MEDT) plays an important role in the energy market regulation processes. It is also responsible for licensing, approval of investment plans and safety standards.

In addition to the proposed activities listed above, the TAJSTAT must consider very seriously the **need for the employment of additional statisticians** for energy statistics. It is estimated that at least two persons are needed and without proper organisation of human capacities in the TAJSTAT, it will be impossible to implement ITS proposed activities.

Moreover, the TAJSTAT needs to appoint a division, which will be responsible for energy statistics. The TAJSTAT is completely aware of the growing importance of energy statistics for different users: ministries and other institutions.

4.2. Key area 2: Development of a reporting system based on international (IEA/ EUROSTAT) standards

- **Capacity building on EU and International Energy Statistics Standards**

The Statistical Agency collects and compiles monthly data on coal, natural gas, petroleum products (gasoline, diesel fuel, mazut, bitumen, asphalt) and electricity production, import, export and consumption. It does not collect data on renewable energies (fuel wood, biomass, solar, wind).

Before any actions related to energy statistics, statisticians must be additionally educated and trained in energy measurement units, conversion equivalents, energy flows etc. For example, Tajikistan statisticians can use various available literatures, such as the publication *Energy Statistics Manual (prepared by the International Energy Agency (IEA) in cooperation with Statistical Office of the European Communities (Eurostat)*, which certainly can significantly contribute to their better understanding of these issues in the future.

Taking into consideration that Tajikistan had compiled its last integrated energy balance more than twenty years ago, additional education and training on the standards applied to energy measurement units, conversion equivalents can be provided by **implementing special activity ITS TA – 2.1**. This activity can be supported by the ITS technical assistance.

- **Improvement of the methodologies for the collection, compilation, quality control and dissemination of energy statistics**

ITS expert team intends to conduct a very detailed review of the methodologies and forms applied for the collection of the data on energy supply, transformations and consumption. The TAJSTAT needs to standardise forms for the collection of data, especially from the small and medium hydropower plants, which are privately owned. There is an urgent need to improve the reporting procedure of such energy subjects. It is proposed to establish a monthly reporting system from the small and medium hydro power producers.

On the basis of the energy statistics assessment and goals of the ITS project, it is recommended to Tajikistan to start with an improvement of energy statistics on the supply side. This means that TAJSTAT should adopt a concept and plan for the collection of data on production, exports, imports, transformation and losses of all energy forms, not only electricity. This requires the involvement of other energy companies and stakeholders in the reporting system.

This specially refers to the companies, which import, export and distribute natural gas, oil and petroleum products in Tajikistan. The data on imports and exports of energy forms will be aligned with those from the Customs Duty. The new concept of the reporting system should include reporting from refinery(ies).

ITS expert team considers it important to develop additional, separate and more precise questionnaires for particular subjects in the energy system, e.g. separate questionnaires for specific categories in the final energy consumers group. The new questionnaires should include questions not only on electricity production and consumption, but also data about production, transformation and consumption of other energy forms. ITS expert team will particularly work on composing the questionnaire for the manufacturing industry.

ITS expert team will review the possibility to include in the existing questionnaire questions about consumption of other energy forms.

Hence, the ITS expert team proposes the implementation of **ITS TA-2.2 activity with an aim to improve the methodologies for energy data collection, compilation and dissemination in line with EU and international standards**.

Additional problem in the TAJSTAT's system for data collection, elaboration and publication is weak statistics on other renewable energies (biomass, fuel wood, solar). Tajikistan has significant potential in hydro potentials energy, biomass and solar energy. Thus, according to the *National Strategy and the National Development Programme for renewable energy sources for the period until 2015* there are various planned actions. It is expected that introducing renewable energies in Tajikistan's energy system will result with a significant impact on the energy balance of Tajikistan.

Proper collection of the data on renewable energies will certainly lead to more accurate energy statistics.

One very specific problem is recognised in the case of Tajikistan. It refers to the insufficient coverage and absence of metering devices. The present issue is how to identify correctly electricity consumption by different types of consumers. These issues will be solved during the detailed preparation of the implementation phase.

- **Adoption of existing surveys to the research on energy consumption**

Energy surveys on final energy consumption in sub-sectors are time and resource-consuming activities, so in the case of Tajikistan, such activities are not recommended till a complete reporting system on energy supply is established and flows on the final energy consumption side are identified. ITS expert team considers that during the years 2013 and 2014, TAJSTAT should work mainly on the development of methodologies for the collection of data on energy supply (production, transformation and losses) and on appropriate collection of existing statistical and administrative data on final energy consumption.

In order to use the existing available systems for data collection, other than energy data, which are officially active in TAJSTAT, the ITS expert team suggests an analysis of the possibilities to include one question on energy in the regular surveys, for example, in regular *Living standard survey*. It is found that TAJSTAT publishes data about expenses on energy consumption (fuels) in households. The extension of this survey with only one question on the quantities of energy consumption could significantly contribute to the final energy consumption, especially to the estimates of renewable energy used (fuel wood, biomass). An **ITS TA activity** (ITS TA - 2.4.) is proposed for **analysing the questions and methods for their inclusion into the regular surveys in the household sector**.

The main results of the activities, which fall under Key area 2 will be proposals of the forms and procedures, which could serve as basis for TAJSTAT in the planning of new activities. TAJSTAT will certainly need to officially adopt new forms and procedures by its internal decrees, decisions or by other means, as the only way, which guarantees permanent activities in energy statistics.

4.3. Key area 3: Energy balances compilation and submission of the questionnaires to the IEA

The structure and the content of the balances described in the Chapter 3.5 do not correspond to the IEA/EUROSTAT format, although they have the main structural components of the IEA/EUROSTAT balance.

The Tajikistan's energy balance described in chapter 3.3 opens many questions on the energy system structure and flows, so a revision of the overall energy chain and relations inside the chain will be needed.

In order to facilitate energy balance compilation, the ITS expert team proposes the implementation of ITS TA – 3.1., 3.2. and 3.3 **which aims to provide assistance in energy balance compilation** based on the improved energy data, as a result of the activities implemented in the framework of Key area 2. The ITS expert team will propose **the adoption and application of a user-friendly,**

simple software tool for energy balance compilation, **and the completion of 5 questionnaires which will be submitted to the IEA.**

The activities will include a three-day training on the concepts applied on energy balance compilation and on the application of a simple model for energy balance compilation and completion of five energy questionnaires and their submission to the IEA. The implementation of this activity will be highly dependent on the results from the activities in Key area 2.

The implementation of the first two activities can start in the third quarter of 2013, and the result will be compiled energy balance for 2012. The assistance in the completion of the five energy questionnaires and their submission to the IEA/EUROSTAT is expected to be implemented by the end of 2013.

The main outcomes of this activity will be:

- increased capacity of the TAJSTAT to compile energy balances based on international standards,
- energy balance aligned with international standards, accessible and available for dissemination free of charge,
- energy questionnaires completed and submitted to the IEA

4.4. Key area 4: Development of a reporting system for monthly energy statistics

At the moment, the TAJSTAT has an obligation to provide to the government the data on the electricity production from HPPs on a monthly basis. The ITS project can provide **technical assistance TA-3.4** in the preparation of the monthly reports and procedures for electricity production and consumption. Because of the request from the government, it is suggested to start with the monthly statistics reporting parallel to the implementation of the previously listed activities, in first quarter of 2013.

It is also suggested to the TAJSTAT to follow and participate in the common (horizontal) activities (workshops, study tours) where this topic will be particularly discussed and where it will be possible to learn from the good practice examples.

4.5. Key area 5: Development of a reporting system on energy prices

TAJSTAT does not collect or publish energy prices. As energy prices reporting is not the main priority of the Tajikistan's ESAP at the moment, the ITS expert team intends to implement a more comprehensive analysis of the pricing conditions in 2013 and to agree with the PCs on the adoption of a common concept for data prices compilation and dissemination.

In the meantime, the TAJSTAT or any other stakeholder responsible for this type of reporting will have the possibility to learn about energy prices reporting from the countries, which can serve as examples of good practice during the common workshops, meetings and from various

communication activities. TAJSTAT is recommended to start the establishment of the energy prices reporting system in the second half of 2014.

The Action Plan estimates that additional technical assistance in this area will be needed. However, the ITS expert team does not foresee provision of assistance for this activity at the moment, because of other priorities. At the end of 2013, the ITS expert team will analyse again the possibilities for ITS assistance in the development of energy prices reporting system in Tajikistan.

4.6. Key area 6: Development of a reporting system on energy and energy efficiency indicators

The main energy indicators are related to data other than energy statistics, like national accounts (gross domestic product, value added, population, employed persons, etc.), trade and other statistics. The reliability and accuracy of these indicators depend on the quality and consistency of all input data.

In 2013, it is suggested to the Statistical Agency of the Republic of Tajikistan to explore initially the availability of all data needed for the calculation of main energy indicators, and to develop indicators according to international methodologies. During 2014, the ITS project will implement several vertical activities related to this topic e.g. providing training on energy and energy efficiency indicators and on modelling of energy data.

Development of energy efficiency indicators requires much more sophisticated statistical and modelling procedures and skills, which, according to the current situation, cannot be realised in the planned project period. So, the ITS expert team did not envisage Technical assistance for this activity.

Energy efficiency indicators, besides depending on energy consumption, depend on a number of other factors, and require the collection of additional data not available in main statistics. They are mainly based on the information gathered from the extensive surveys on energy consumption characteristics, technology used, building characteristics and other factors in different consumption sectors (industry, transport, households, and services). Besides a statistical analysis, energy efficiency indicators require specific professional skills, like energy modelling and similar analytical skills related to the identification of end-use energy consumption.

In 2014, following the joint INOGATE and IEA Energy Statistics and Indicators Training in Tbilisi, Georgia (5.-9. November 2012), the ITS project plans to implement additional regional activities related with this topic such as a study tour and regional workshops (RA 5).

The study tour will include, in addition to a visit to an advanced NSI in energy statistics and energy balances, a provision of a short training/workshop on energy and energy efficiency indicators (RA 5).

Also, in 2013 and 2014, during the international conference: *Achievement of the Energy Statistics Action Plans* and workshop (RA 6) the Statistical Agency of the Republic of Tajikistan will be able to observe the progress and improvement of energy efficiency indicators in some Partner Countries, which are more advanced in such analyses.

The ITS project will disseminate project results on the official web page and during the implementation together with various other communication activities planned in the framework of the INOGATE project.

If, at the end of 2013, the Statistical Agency of the Republic of Tajikistan estimates that it can conduct specific surveys on energy consumption on its own, then in 2014 the Action Plan for that year will be updated with the estimation of the resources needed to provide only technical assistance for this activity. The ITS project estimates that an engagement of external technical assistance for this activity will be needed, however this technical assistance cannot be provided by the ITS project.

5. NEEDED RESOURCES FOR THE ACTION PLAN IMPLEMENTATION AND SUPPORT FROM THE ITS PROJECT

In order to achieve target goals described in the previous chapter, the Statistical Agency of the Republic of Tajikistan (TAJSTAT) and other main stakeholders in energy statistics should have certain resources at their disposal to implement the proposed activities.

In this Action Plan, resources are expressed in terms of:

- total needed expert **Technical assistance (TA)** for overall activities envisaged under this Action Plan (man/days),
- **ITS Technical assistance** at country level - **ITS TA** (man/days) and **ITS Regional assistance - ITS RA**, as support to the implementation of the selected activities;
- the engagement of the **local experts (ITS - LE)** for the implementation of specific tasks within particular activities (man/days),
- needed availability of the existing **human capacities (HC)** within energy statistics system in the Partner Country (Tajikistan), which will have to actively participate in the implementation of the Action Plan (man/days),
- estimation of the needs for **new additional staff (NS)** in Partner Country in the field of energy statistics (man/year) in case where such staff does exist or where existing capacities are not sufficient to implement targeted actions.

The estimation of all resources needed for the implementation of Tajikistan's Action Plan is presented in Table 5-1.

Total **Technical assistance (TA)** is based on estimates of the needed professional consultation services, expressed in man/day units. These services include on-site trainings, small workshops, personal education, etc. **Technical assistance from ITS project (ITS TA)** is assistance to the selected activities, which maximally contribute to the energy statistics progress.

Engagement of **local experts** within ITS project (**ITS LE**) is envisaged mainly in cases where implementation of the surveys on energy consumption is planned. The implementation of energy surveys strongly depends on the existence of certain prerequisites such as supporting Programs in NSIs, available human resources, and others. If the Partner Country can ensure budget for the conduction of the surveys, ITS project will provide technical assistance for the methodologies development and implementation of the surveys. At the moment, the Action Plan does not foresee the conduct of such surveys in Tajikistan.

In order to ensure the implementation of the activities defined in the Action Plan, the PCs need to ensure the availability of appropriate staff or **human capacities (HC)**, which will actively participate in the implementation of the activities. In cases where such does not exist, the Action Plan estimates the needs for the employment of **new staff (NS)**, which are expressed in man units. In the case of Tajikistan, the ITS project estimates that the employment of new personnel is needed.

The total technical assistance in Tajikistan is estimated to 59 man/days, and the ITS project support can provide 48 man/days or 80 percent of the total assistance needed. Tajikistan is requested to place at the disposal of the ITS expert team, its experts in energy statistics, a total amount of approximately 157 man/days. There is a need for additional employment in TAJSTAT for the energy statistics activities.

The breakdown of resources by key areas is presented in the table 5-2, while more detailed presentation of the implementation schedule of certain activities (horizontal and vertical activities), including breakdown of resources, is shown in table 5-3.

Table 5-1: Resources for the Tajikistan’s Energy Statistics Action Plan 2012 – 2015 implementation

Years		2012			2013			2014			
Quarters	total	3	4	1	2	3	4	1	2	3	4
Technical assistance (TA):											
Total technical assistance, man/days	59	0	0	23	1	1	18	5	0	6	5
ITS TA, man/day	48	0	0	19	1	1	17	5	0	0	5
ITS LE, man/day	0	0	0	0	0	0	0	0	0	0	0
Human capacities (HC) in Partner Country											
Total, man/day	157	0	0	63	3	3	52	15	0	6	15
Additional employment											
Total, man/year	2										

Table 5-2: Specification of the resources for Tajikistan’s Energy Statistics Action Plan 2012 – 2015 implementation

Years		2012			2013			2014			
Quarters	total	3	4	1	2	3	4	1	2	3	4

TA 1. Development/improvement of Legal and Institutional Framework including:

TA, man/day	6	0	0	6	0	0	0	0	0	0
ITS TA, man/day	6	0	0	6	0	0	0	0	0	0
ITS LE, man/day	0	0	0	0	0	0	0	0	0	0
HC, man/day	12	0	0	12	0	0	0	0	0	0

TA 2. Improvement of data collection, compilation, management and analysing in line with EU and international standards

TA, man/day	24	0	0	15	1	1	2	5	0	0	0
ITS TA, man/day	22	0	0	13	1	1	2	5	0	0	0
ITS LE, man/day	0	0	0	0	0	0	0	0	0	0	0
HC, man/day	72	0	0	45	3	3	6	15	0	0	0
Surveys on energy consumption, thous. €											
<i>Industry - 0 units</i>	0										
<i>Transport - 0 units</i>	0										
<i>Households - 0 units</i>	0										
<i>Service - 0 units</i>	0										
<i>Others (agriculture, constr....) - 0 units</i>	0										

TA 3. Energy and commodity balance compilation in line with EUROSTAT/IEA methodologies

TA, man/day	22	0	0	2	0	0	15	0	0	0	5
ITS TA, man/day	20	0	0	0	0	0	15	0	0	0	5
ITS LE, man/day	0	0	0	0	0	0	0	0	0	0	0
HC, man/day	66	0	0	6	0	0	45	0	0	0	15

TA 4. Development of the reporting system on energy prices

TA, man/day	6	0	0	0	0	0	0	0	0	6	0
ITS TA, man/day	0	0	0	0	0	0	0	0	0	0	0
ITS LE, man/day	0	0	0	0	0	0	0	0	0	0	0
HC, man/day	6	0	0	0	0	0	0	0	0	6	0

TA 5. Development of the energy and energy efficiency indicators

















TA, man/day	1	0	0	0	0	0	1	0	0	0	0
ITS TA, man/day	0	0	0	0	0	0	0	0	0	0	0
LE, man/day	0	0	0	0	0	0	0	0	0	0	0
HC, man/day	1	0	0	0	0	0	1	0	0	0	0

TOTAL

TA, man/day	59	0	0	23	1	1	18	5	0	6	5
ITS TA, man/day	48	0	0	19	1	1	17	5	0	0	5
LE, man/day	0	0	0	0	0	0	0	0	0	0	0
HC, man/day	157	0	0	63	3	3	52	15	0	6	15

Table 5-3: Energy Statistics Action Plan 2012 – 2015 for Tajikistan: Technical assistance (TA) and Regional activities (RA)

Technical assistance (TA)				2012		2013		2014					
	Main stakehold.	Needed TA, man/days	ITS support, (ITS TA)	3	4	1	2	3	4	1	2	3	4
TA 1. Development/improvement of Legal and Institutional Framework including:													
1.1 Proposals for the appropriate legal framework													
1.2 Energy statistics strategies and programs (short/long-term)	TAJSTAT	2	yes										
1.3 Institutional relationship between main stakeholders	TAJSTAT, MEI, MEDT	2	yes										
1.4 Capacity building on institutional organisation	TAJSTAT, MEI, MEDT	2	yes										
1.5 Capacity building on the integration of the energy statistics and energy planning													
TA 2. Improvement of the data collection, compilation, management and analysing in line with EU and international standards													
2.1.Capacity building on EU and International Energy Statistics Standards													
Introduction of the EU standards into energy statistics system	TAJSTAT	2											
2.2. Development/improvement of the reporting system													
Energy supply data (production, imports, exports, international marine bunker, stock)	TAJSTAT	3	yes										
Energy transformations (electricity and heat, petroleum products, coal derived fuels, LNG, CNG, ...)	TAJSTAT	3	yes										
Final consumption (industry, transport, non-energy, other sectors: residential, services, agriculture,)	TAJSTAT	3	yes										
Dissemination of the improved forms, data collection and elaboration from energy reporting units	TAJSTAT	7	yes										
Monthly statistics (M-3), (M-1)	TAJSTAT	3	yes										
2.3. Development/improvement of the surveys for the final energy consumption data collection:													
Industry													
Transport													
Households													

Service				
Others (agriculture, construction...)				
2.4. Adaptation of the existing surveys to the research on energy consumption	TAJSTAT	3	yes	
2.5 Reconstruction of the data from energy surveys in the years after the reference year				
TA 3. Energy and commodity balance compilation in line with EUROSTAT/IEA methodologies				
3.1. Compilation of the commodity balances (2011, 2012, 2013):				
Electricity and heat	TAJSTAT	3	yes	
Natural gas	TAJSTAT	3	yes	
Oil	TAJSTAT	3	yes	
Solid fossil fuels and manufactured gas	TAJSTAT	3	yes	
Renewable and waste	TAJSTAT	3	yes	
3.2. Application of the simple tool for the energy balance compilation:				
Application and adoption of the user friendly tool for the energy balance compilation	TAJSTAT	1	yes	
Energy supply data compilation	TAJSTAT	1	yes	
Energy transformation data compilation	TAJSTAT	1	yes	
Data on final energy consumption	TAJSTAT	1	yes	
3.3. Dissemination of annual energy questionnaires to IEA:				
Electricity and heat, Natural Gas, Oil, Solid fossil fuels and manufactured gas, Renewable and waste	TAJSTAT	1	yes	
3.4. Monthly energy statistics reporting				
Dissemination of monthly energy balances (M-3), (M-1)	TAJSTAT	2		
TA 4. Development of the reporting system on energy prices				
4.1. Development of the methodology for:				
a) electricity and gas prices reporting for industrial customers and households (EUROSTAT)	TAJSTAT	2		
b) energy prices reporting (IEA)	TAJSTAT	2		
4.2. Dissemination of the reports on gas and electricity prices				
	TAJSTAT	2		
TA 5. Development of the energy and energy efficiency indicators				
5.1 Review of the data available for energy indicators compilation, assessment of the needed data				
	TAJSTAT	1		
5.2 Development of the methodology for energy indicators monitoring and verification				
	TAJSTAT			
5.3 Adaptation, training and application of the user friendly tool for the energy indicators calculation				
	TAJSTAT			

REGIONAL ACTIVITIES (RA)	Duration in days	2012		2013		2014					
		3	4	1	2	3	4	1	2	3	4
RA 1: Development/improvement of the Legal and Institutional Framework											
1st workshop: Energy Statistics Network meeting: Development of ESAP and establishment of ESN, 25-26 September 2012	2	■									
International Conference on Raising Awareness on the Importance of Energy Statistics for National Policies, March 2013	2			■							
Support to the national meeting on the importance of the energy statistics for national policies	1				■						
Support to the national meeting on the division of the labour and data sharing among stakeholders	1				■						
RA 2: Improvement of the data collection, compilation, management and analysing in line with EU and international standards											
Study tour on energy statistics and balances with special emphasis on surveys on final energy consumption	5				■						
International conference on the quality of energy data	2								■		
RA 3. Energy and commodity balance compilation in line with EUROSTAT/IEA methodologies											
Study tour on energy statistics and balances with special emphasis on the development of the 5 energy IEA/EUROSTAT questionnaires	5								■		
RA 4. Development of the reporting system on energy prices											
This activity will be combined with RA 5. activity at a later stage of the project.											
RA 5. Development of the reporting system on energy and energy efficiency indicators											
Study tour on energy statistics and balances with special emphasis on energy efficiency indicators	5									■	
Study tour on energy statistics and balances with special emphasis on energy indicators and planning for the energy strategies										■	
RA 6. Evaluation of the achieved results											
International conference on the achievements in the Energy Statistics Action Plans	2										■
Workshop on the Achievement of Energy Statistics Action Plans & other activities	2								■		

ANNEX 1 – LIST OF THE MEETINGS DURING THE INCEPTION MISSION

Meeting with the Director of Statistical Agency under President of the Republic of Tajikistan (TAJSTAT), June 19, 2012, 10:00 AM

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Fax: (+992 372) 214 375

E-mail: stat@tojikiston.com

Website: <http://www.stat.tj/en/>

Participants

- Mrs. Bakhtiya Ziedulloevna Mukhammadieva, Director, Tel.: (+992 935) 055 840
- Mr. Asvat Rakhimovich Asoev, Deputy Director, Tel.: (+992 907) 743 790
- Mr. Khokimbeg Nakatov, Head, Department for Statistics of Industry, Investments and Construction, Tel.: (+992 372) 276 512, E-mail: nakatov_77@bk.ru
- Mrs. Svetlana A. Ivannikova, Deputy Head, Department for Statistics of Industry, Investments and Construction/ Head of Unit of Industrial Statistics, Tel.: (+992 372) 276 301, E-mail: iv.Svetlana.58@mail.ru
- ITS team: Gloria Aguinaldo, Damir Pesut, Anna Petrus

Technical Meeting with Agency on Statistics under President of the Republic of Tajikistan, June 19, 2012, 11:30 AM

Participants:

- Mr. Khokimbeg Nakatov, Head, Department for Statistics of Industry, Investments and Construction, Tel.: (+992 372) 276 512, E-mail: nakatov_77@bk.ru
- Mrs. Svetlana A. Ivannikova, Deputy Head, Department for Statistics of Industry, Investments and Construction/ Head of Unit of Industrial Statistics, Tel.: (+992 372) 276 301, E-mail: iv.Svetlana.58@mail.ru
- ITS team: Gloria Aguinaldo, Damir Pesut, Anna Petrus

Meeting with the Ministry of Energy of the Tajik Republic, Department of Electricity on June 22, 2012, 13:30 PM

Participants

- Mr. Nazar Goibov, Deputy Head, Department of Electricity, Tel.: (+992 372) 213 005, E-mail: g.nazar.s@mail.ru
- Timur Gavarovitch Valamat – Zade, Main Specialist, Department of Electricity, Tel.: (+992 372) 213 005, E-mail: rumit1940@mail.ru
- ITS team: Gloria Aguinaldo, Anna Petrus

Meeting with Barki Tojik's Department for Economic Planning on June 21, 2012, 13:30 PM in company's premises

Participants

- Mr. Faridun Murtazoev, Head, Department for Economic Planning, OJSHPC "Barki-Tojik", Tel.: (+992 372) 295 117, E-mail: faridun76@mail.ru
- Mrs. Zulfiya Isamutdinova, Deputy Head, Department for Economic Planning, OJSHPC "Barki-Tojik", Tel.: (+992 372) 295 419, E-mail: zulf68@mail.ru
- Mr. Khokimbeg Nakatov, Head, Department for Statistics of Industry, Investments and Construction, Tel.: (+992 372) 276 512, E-mail: nakatov_77@ bk.ru
- Mrs. Svetlana A. Ivannikova, Deputy Head, Department for Statistics of Industry, Investments and Construction/ Head of Unit of Industrial Statistics, Tel.: (+992 372) 276 301, E-mail: iv.Svetlana.58@mail.ru
- ITS team: Gloria Aguinaldo, Damir Pesut, Anna Petrus

Meeting with the Ministry of Energy of the Tajik Republic, Department of Economic Forecasting, June 22, 2012, 15:00 PM

Participants

- Mr. Mamad Khodzha Narzulaev, Head, Department of Economic Forecasting, Tel.: (+992 372) 216 540
- Mr. Timur Gafarovich Valamat-Zade, Chief Specialist, Department of Electricity, Tel.: (+992 372) 213 005, E-mail: rumit1940@mail.ru
- ITS Team: Gloria Aguinaldo, Anna Petrus

ANNEX 2 – AREAS FOR TECHNICAL ASSISTANCES UNDER THE ITS PROJECT

5.1. List of the activities

Key area	Indicative Technical Assistance under the ITS
TA-1	Development/improvement of the Legal and Institutional Framework
	<p>TA-1.1. Development of the appropriate legal framework for energy statistics (laws, sub laws, strategies, plans)</p> <p>TA -1.2. Development of long-term energy statistics strategies and programs for data collection and compilation</p> <p>TA-1.3. Improvement of institutional relationship on energy statistics</p> <p>TA-1.4. Capacity building on the institutional organisation for energy statistics</p> <p>TA-1.5. Capacity building on the integration of energy statistics and energy planning procedures</p>
TA-2	Improvement of the data collection, compilation, management and analysing in line with EU and international standards
	<p>TA-2.1. Capacity building on the EU and International Energy Statistics Standards</p> <p>TA- 2.2. Improvement of the methodologies for the collection, compilation, control and dissemination of energy statistics</p> <p>TA - 2.3. Assistance/capacity building during the organisation and implementation of the surveys on final energy consumption, provision of a user-friendly tool for the management and compilation of energy data gathered from the surveys</p> <p>TA – 2.4 Adaptation of the existing (household) sector surveys to the research on energy consumption</p> <p>TA – 2.5. Reconstruction of data from the energy surveys in the years after the reference year</p> <p>TA – 2.6. Support to the Covenant of Mayor initiatives</p>
TA-3	Assistance in the compilation of energy and commodity balances
	<p>TA – 3.1. Assistance in the completion of the national energy balance for (2011, 2012 or 2013) and harmonisation with EUROSTAT/IEA methodologies and standards;</p> <p>TA – 3.2. Adaptation and training in the application of a user friendly software tool for energy balance compilation;</p> <p>TA – 3.3. Compilation of annual energy data in defined questionnaires and submission to the IEA.</p> <p>TA – 3.4. Development of monthly energy data reports compliant with EUROSTAT/IEA standards (M-1, M-3)</p>

TA-4	Development of a reporting system on energy prices	TA – 4.1. Development of a methodology for gas prices reporting TA – 4.1. Development of a methodology for electricity prices reporting TA – 4.2. Reporting on gas and electricity prices
TA-5	Development of a reporting system on energy (efficiency) indicators	TA – 5.1. Review of data available for energy indicators compilation, assessment of the needed data TA – 5.2. Development of a methodology for energy (efficiency) indicators monitoring and verification TA – 5.3. Adaptation, training and application of a user friendly tool for calculating energy (efficiency) indicators

5.2. Brief description of the indicative Technical assistances (TA) under the ITS project

TA- 1. Development/improvement of the Institutional and Legal Framework

TA -1.1. Proposals for the appropriate legal framework for energy statistics

This activity aims to identify gaps in the existing legal framework for the collection, compilation, maintenance, dissemination and confidentiality of energy data, and to propose the content of new laws.

TA -1.2. Assistance in the development of long-term energy statistics strategies and programs for a timely and reliable data collection and compilation

This activity includes proposals for the development of the following programs:

- collection and compilation of data from energy suppliers, energy industries, energy consumers (final energy consumption surveys);
- elaboration of the procedures for the collection of data from intermediate sources, analysis of the overlapping with other requests;
- development of a list of required activities and identification of the stakeholders involved in their implementation.

TA -1.3. Development of the institutional organisation

The establishment of an appropriate institutional organisation among relevant stakeholders involved in the collection, compilation, standardisation and dissemination of energy statistics is crucial for the “energy statistics system effectiveness” and will result in the following:

- a data collection system based on “minimum cost” and on the avoidance of the duplication of the stakeholders’ work,
- coordination mechanisms for monitoring the performance of the national energy statistics system,
- additional motivation of relevant stakeholders to actively participate in the system.

The result of this activity will be concept paper for the NSI and other responsible stakeholders which will serve as a guide and help in the organisation of the statistical system. The concept paper will be prepared based on the consultations with NSIs.

TA -1.4. Capacity building on the institutional organisation for energy statistics

This activity will be implemented by organising common meetings with relevant stakeholders in order to provide capacity building in the NSI and of other staff involved in the NSS:

- educating statisticians/experts in the NSIs, the responsible ministries, energy suppliers and industries, energy agencies/committees, energy planning and policy commissions about their roles and obligations in the institutional organisation,
- initiating common discussions and a dialogue about the national statistics legislation or relevant administrative regulation and institutional organisation, in order to establish a solid foundation for a good quality and timely energy statistics,
- increasing the awareness of the importance of timely and reliable energy data.

The activity will be implemented through one (or two) day on-site training.

TA -1.5. Capacity building on the integration of energy statistics and energy planning procedures

The aim of this activity is to additionally educate experts and statisticians from the NSIs, responsible ministries, energy suppliers and industries, energy agencies/committees, energy planning and policy commissions about the importance of the integration of methodologies applied to short and long term energy planning and of an accurate, reliable and timely reporting of the official energy statistics and balances.

TA -2. Improvement of the energy data collection, compilation, maintenance and dissemination in line with EU and international standards

TA -2.1. Capacity building on the EU and International Energy Statistics Standards

This activity will provide trainings in the standards applied to energy measurement units and conversion equivalents, energy commodity flows relevant in energy statistics: production, external trade, international marine bunkers, stocks, fuel transformation and final consumption.

TA -2.2. Improvement of the methodologies for the collection, compilation, quality control and dissemination of energy statistics

This activity will include one (or two) on-site training and expert assistance through emails and conference calls during the project duration for the following:

- detailed identification of energy flows in the production, supply, transformation and consumption sectors,
- development/improvement of forms for administrative energy data reporting (annual, quarterly, monthly),
- development/improvement of information collecting from statistical data sources (census, surveys),
- development of data compilation methods: data validation and editing, calculation of missing data, estimation of population characteristics,
- development of a database for the organisation and management of energy data,
- development of a dissemination policy (reference period and data dissemination timetable, dissemination formats, metadata and quality reports).

TA -2.3. Assistance during the organisation and implementation of the surveys on final energy consumption

The following list of activities comprises actions that can be provided through on-site training and direct expert assistance for the following:

- definition of the sample size and the selection of a sample, the design of the questionnaire, training and education of interviewers, development of a database for the organisation of data, analysis procedure, final energy balance compilation,
- adoption of a model for the validation, editing, calculation of missing data and estimation of the final energy consumption,
- target sectors: industry, households, services, transport, construction, agriculture,
- identification of actual consumers, e.g. in the household sector.

TA -2.4. Adaptation of the existing surveys in the household sector to the research on energy consumption

In cases where the NSI conducts a regular, periodical (annual) survey in households on living standards, consumption etc., and where surveys on energy consumption are not envisaged in the Action Plan, a proposal for adding specific questions to the questionnaires applied in these surveys will be developed, as well as a methodology of elaborating the data gathered and the results achieved.

TA -2.5. Reconstruction of data from energy surveys in the years after the reference year

In cases where the energy consumption surveys will be implemented, in the years after the reference year, a calibration of data on energy consumption from the surveys and of updated data collected from administrative and other sources will be performed through on-site training and assistance.

TA- 3. Energy balance compilation

TA -3.1. Assistance in the completion of the national energy balance, harmonisation with EUROSTAT/IEA methodologies and standards

This includes on-site training and assistance in the development of the framework for the compilation and harmonisation of data on fuel and energy products during the reference period.

TA -3.2. Adaptation and training in the application of a user-friendly model (software tool) for the energy balance compilation

This includes the development of a user-friendly tool for energy balance compilation, as well as the training of the staff in the NSC and providing instructions on its use. The tool will work as an open

source model, which enables the presentation of energy data in a table format (columns – energy products, rows – energy flows).

TA -3.3. Compilation of annual energy data in defined questionnaires and submission to the IEA

This activity envisages capacity building and assistance in the completion of the five joint Eurostat/IEA annual energy questionnaires for the years 2012/2013.

TA -3.4. Development of monthly energy data reports compliant with EUROSTAT/IEA standards (M-1, M-3)

This activity will result in the development of appropriate methodologies for the reporting of monthly energy data, in line with the Regulation 1099/2008 on energy statistics, and of their reporting to the IEA.

TA – 4. Development of a reporting system on energy prices

TA -4.1. Development of a methodology for gas prices reporting

This includes the development of appropriate methodologies for the collection and compilation of gas energy prices, according to the Directive 2008/92/EC on the transparency of gas and electricity prices charged to households and industrial end-users.

TA -4.2. Development of a methodology for electricity prices reporting

This includes the development of appropriate methodologies for the collection and compilation of electricity prices, according to the Directive 2008/92/EC on the transparency of gas and electricity prices charged to households and industrial end-users.

TA – 5. Energy (efficiency) indicators compilation and monitoring

TA -5.1. Review of data available for energy indicators compilation

This activity intends to review all available data in the NSI, energy agencies and other institutions, in order to evaluate the possibility for the development of energy indicators. This will include possibilities for the compilation of energy efficiency indicators, basic indicators on the security of supply, environmental issues etc.

TA -5.2. Provision of methodology for energy (efficiency) indicators monitoring

On the basis of available data and of a plan for gathering new data, a clear and transparent methodology for monitoring and verifying energy savings and improving energy efficiency will be developed.

TA -5.3. Development of a user-friendly tool for calculating energy (efficiency) indicators

The PCs will be provided with an easy-to-use and cost-effective tool for calculating energy (efficiency) indicators.

TA -5.4. Training in the use of the methodology and software for the energy (efficiency) indicators compilation

This activity will result in providing the representatives of the institutions competent for monitoring and verification of energy savings with training in using this methodology.

ANNEX 3 – INDICATORS FOR MONITORING THE PROJECT IMPLEMENTATION AND SUCCESS

ACTIVITY	status 9/2012	status 9/2013
Development / improvement of Legal and Institutional framework		
Number of needed new or improved legal documents (primary and secondary) related to energy statistics	0	0
Available methodology for the energy statistics and energy balances compilation harmonised with IEA/EUROSTAT standards (yes/no)	yes	yes
Number of needed short/long-term development plans for energy statistics	0	1
Number of experts and statisticians employed in energy statistics in the NSS and the NSI (central and regional offices)	?	1
Number of experts and statisticians educated during the workshops/seminars organised by the IEA/EUROSTAT or other relevant institutions during the last five years	?	1
Number of common meetings among the key energy statistics stakeholders (data collectors and providers) held during the last five years in order to discuss energy statistics issues/energy efficiency issues.	?/?	1
Improvement of the data collection, compilation, management and analyses in line with EU and international standards		
Applied International standards on economic activities and International standards on products and services in energy statistics (yes/no)	yes	yes
Number of forms officially applied in the collection of energy data/number of forms to be improved/number of new forms needed	7/3/4	10/3/3
Developed and implemented methodology of the surveys on energy consumption during last 5 years in (yes/no):		
- household sector	no	no
- industry sectors	no	no
- services	no	no
- agriculture/construction	no	no
Assistance in energy and commodity balance compilation		
Compilation of energy and commodity balances harmonised with EUROSTAT/IEA standards	no	no
Needed application of a simple software tool for energy balance compilation (yes/no)	yes	yes
Submission of the energy questionnaires in defined formats to the IEA (0-5)	0	0
Number of improved energy questionnaires submitted to the IEA	0	0
Short-term (monthly) energy statistics compiled in line with the EC Regulation 1099/08	no	
Development of a reporting system for energy prices		
Reporting on electricity and gas prices (yes/no)	no	no
Development of energy (efficiency) indicators		
Available special methodology and a simple software tool for the compilation of the disaggregated energy efficiency indicators	no	
Number of energy efficiency indicators defined in the current methodologies/number of energy efficiency indicators needed	1/35	

ANNEX 4 – CONTACT DETAILS

Contact details of the person(s) who reviewed Draft /Proposal

Institution: The Statistical Agency under the President of the Republic of Tajikistan
Address: Bokhtar 17 str., Dushanbe

Name and Surname: Asmatbekov Firdavsi Yakubalitoyevich
Department: Department for Statistics of Trade and Services
Position: Head
Date: 22/01/2013

Institution: The Statistical Agency under the President of the Republic of Tajikistan
Address: Bokhtar 17 str., Dushanbe

Name and Surname: Ivannikova Svetlana Anatolievna
Department: Department for Statistics of Industry, Investments and Construction
Position: Head of Unit of Industrial Statistics
Date: 22/01/2013

ANNEX 5 – PROPOSED MANNER OF ADOPTION OF THE ESAP

Please choose any of the following:

- Memorandum of understanding (MoU)** - a formal alternative to a gentlemen’s agreement between the National Statistical Institute (NSI), Ministry responsible for policy making in the energy sector and the INOGATE Technical Secretariat on the implementation of the Energy Statistics Action Plan.

- Document of approval to be signed by responsible authorities in the NSI and Ministry will be enclosed with the final ESAP.

- Other manner of adoption, please suggest:
