



HOW ENERGY STATISTICS AND BALANCES ARE USED FOR ENERGY PLANNING: Moldovan Experience

**Ms. Ina Cretu, Senior Consultant, Ministry of
Economy of the Republic of Moldova**

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Progress in the field of Energy Statistics

- The Government has considered the various legal bases for implementation of the EU legislation relating to energy statistics and has taken actions to implement the relevant *acquis*.
- The Government has adopted an action plan for the creation of an energy statistics system.
- In February 2013 the Ministry of Economy has established the Working Group on 'energy statistics' and has improved the communication among the relevant bodies.
- Overall, good quality energy data statistics especially on the supply side
- Technical assistance provided by a number of donors: Inogate-ITS / Energy Community, European Commission, USAID



Transposition of EU acquis in the field of energy statistics

- Taking into account the engagements taken by the Republic of Moldova, as a Contracting Party in the Energy Community Treaty, and according to the decision taken during the Ministerial Council from October 2012, our country is transposing the *Commission Regulation (EU) No 147/2013 of 13 February 2013* amending Regulation (EC) No 1099/2008 of the European Parliament and of the Council on energy statistics and *Directive 2008/92/EC of 22 October 2008* concerning a Community procedure to improve the transparency of gas and electricity prices charged to industrial end-users until the 31 December 2013.
- Thus, for the transposition of the EU acquis, the Ministry of Economy, jointly with the National Bureau of Statistics, have developed the draft Methodology concerning the energy statistics and energy prices, which, at the moment, is under the process of completion and coordination.
- In 4th quarter 2014, this draft Methodology is planned to be approved at NBS College.



Action Plan for the creation of Energy Statistics System for Moldova

- On February 24th 2014 the Moldovan Government has adopted the Government Decision on the creation of Energy Statistics System
- The respective draft Government Decision contains the concept of ES's system, Action Plan, responsibilities, for the actions provided for the creation of system of energy statistics.
- The overall objective is to establish an IT-supported ESS at the national level as a reference system aimed at assisting the three core institutions of public administration at the central level in:
 - (i) official energy statistics - National Bureau of Statistics (NBS)
 - (ii) energy sector policy and strategy coordination and implementation – MoE,
 - (iii) monitoring and verification of NEEAPs and NREAP including production of energy efficiency (EE) and renewable energy sources (RES) specific indicators - Energy Efficiency Agency (EEA),
- in (1) producing high-quality energy statistics for the past and the future including relevant indicators and in (2) reporting to both national stakeholders as well as international organisations (e.g. EUROSTAT, IEA etc.) in line with best European standards and best practices.



Energy statistics system

1. NBS Component:
Historic energy
balances for the past
and aggregate energy
sector indicators –
**Official energy
statistics**

2. MoE Component:
Perspective energy
balances for the next
year and medium- to
long-term energy
balances based on
model runs - **Official
forecasts** aiming at
securing energy
supply

3. EEA Component:
Database on EE and
RES in support of
monitoring and
verification of NEEAPs
and NREAP including
EE and RES indicators



Work Programme in the field of Energy Statistics

- WP1:** Amendment and supplement of the legal and regulatory framework;
- WP2:** Institutional capacity building - improvement of the institutional-organisation framework;
- WP3:** Improvement of the required IT system (hardware and software);
- WP4:** Improvement of the existing and development of new methodologies and procedures (sector classification, data collection and validation systems, perspective energy balance methodologies);
- WP5:** Human capacity building / training: internal (NBS, MoE, EEA) and external (data providers);
- WP6:** Implementation of improved methodologies, procedures, methods and tools, HW/SW based on improved legal & regulatory and institutional & organisational frameworks;
- WP7:** Reporting: internationally and locally;
- WP8:** Other.



INOGATE Energy Statistics Action Plan (ESAP)



- ✓ The Republic of Moldova adopted ESAP by signing a Memorandum of Understanding in April 2013 by the Ministry of Economy, the National Bureau of Statistics and INOGATE Technical Secretariat.
- ✓ This document is aimed at officially adopting the Energy Statistics Action Plan (ESAP) by clearly determining the role and responsibility of the sides in implementing the activities stipulated in the plan .
- ✓ This includes institution and capacity building activities envisaged to develop the institutional framework for energy statistics, and to improved methodologies applied in data collection and compilation of energy statistics, energy balances, energy prices and energy efficiency indicators, which are harmonised with international standards.



Development of Energy Statistics in Moldova

- Significant progress achieved in 2014 by NBS towards:
 - Compliance with international Energy Balance format (EUROSTAT, IEA)
 - NBS already reports energy data to EUROSTAT and IEA (5 questionnaires)
 - Introduction of questions on energy consumption in Household Budget Survey
 - Implementation of monthly energy data collection (pilots)
 - Implementation of half-yearly price data collection (pilots)
- The new questionnaires and forms are reflected in the Programme of Statistical Works for 2015 year, subject to governmental approval.
- Pending on the availability of staff resources and software tools, these surveys could be rolled-out in 2015 or 2016.
- As a result, the development of a new IT system for the Energy Statistics department – and its financing - remains a pre-requisite for the successful and timely implementation of additional field surveys as well as a direct reporting in the EUROSTAT and IEA formats.



Use of energy statistics in the energy planning process

- The energy statistics is used by the Department of energy security and efficiency from the Ministry of Economy of the Republic of Moldova.
- In the development of strategic documents and policies our ministry always uses the effective energy statistics data, since without an analysis of the current situation and assessment of the dynamics and structure of the statistical data is not possible to formulate specific goals and objectives for the energy sector.

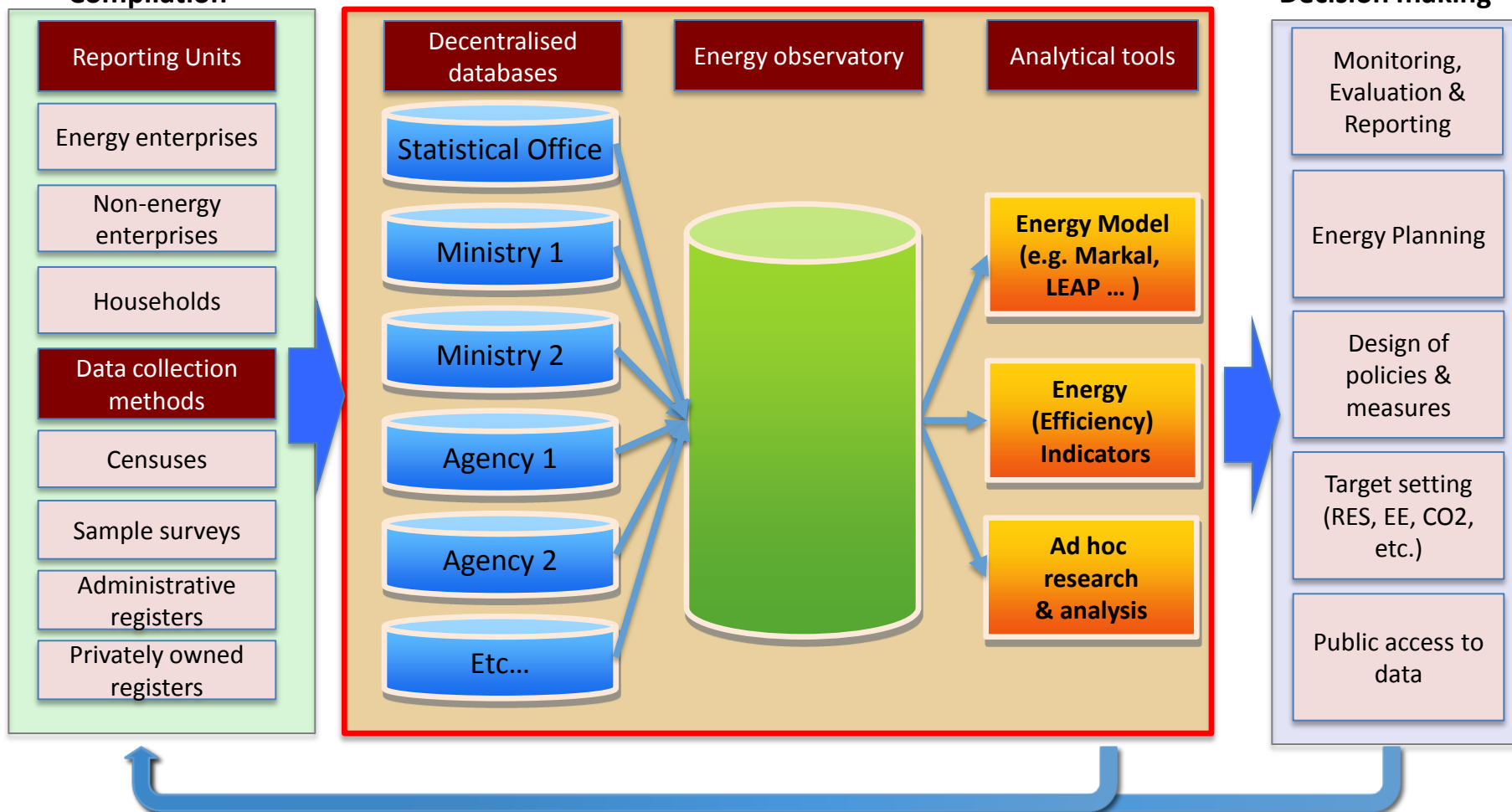


Typical Energy Statistics and Planning System

Primary data collection & Compilation

Secondary data collection, Compilation & Analysis

Dissemination & Decision making





Use of energy statistics and balances in the energy planning process

In the last period the energy statistics was used in the process of development of the following strategic policy documents:

- National Development Strategy “Moldova 2020” (priority: Energy supplied surely, used efficiently)
- Energy Strategy till 2030
- Road Maps for the energy sector (electricity and natural gas)
- National Program for energy efficiency till 2020
- National Action Plan on Energy Efficiency 2013-2015
- National Renewable Action Plan till 2020
- Concept regarding the institutional and financial restructuring of DHS in Chisinau municipality etc.



Energy balance forecasts

- The development of the first prospective Energy balance for 2015 year will be completed by the Ministry of Economy, jointly with the Power Engineering Institute, in December 2014.
- A methodology for the elaboration of short-term energy balance forecasts has been presented during the trainings on energy statistics and energy planning in September-November 2014, organized by TA-ESS project.
- It is based on a two-pronged approach involving simple quantitative projection methods and a qualitative assessment of the importance of key demand and supply infrastructure projects (i.e. infra projects likely to be commissioned or decommissioned during the forecast period).



INOGATE Support to the Republic of Moldova in the Field of Energy Statistics (1)



- Development of tailor-made methodologies and user-friendly tools for energy data collection and energy balance compilation;
- Assistance in the implementation of surveys in the sectors of enterprises and households;
- Assistance in the compilation of annual energy balance for 2013 and in filling in joint EUROSTAT/IEA/UNECE annual energy questionnaires;



INOGATE Support to the Republic of Moldova in the Field of Energy Statistics (2)

- Provision of various national and regional capacity building activities (trainings and workshops, international conferences, study visits, IEA training) for policy decision makers, energy statistics specialists, main stakeholders and energy companies involved in energy statistics system and other;
- Support the participation of the representatives of the Republic of Moldova in Energy Statistics Network.





Problems in the field of Energy statistics

- The **inherited practice** in energy system accounting from the former Soviet Union, which asks for **amended and new methodologies, procedures and reporting lines** in line with EUROSTAT and IEA requirements;
- The **insufficient institutional as well as personnel capacities** available in core ESS stakeholders' institutions (NBS, MoE and EEA), which asks for **specialisation and recruitment of new personnel in deficient posts** required for energy statistics including intensive training;
- The NBS' **IT system** for Energy Statistics is an old MS DOS based application which is totally **inflexible** since it does not allow the addition of new questions to existing questionnaires or the creation of new questionnaires without heavy programming and coding.
- The generally **recognised limited capability of the State** to ensure effective inter-agency cooperation, however this is badly needed to coordinate the whole process and safeguard progress, which asks for **concerted approach of main actors**.



Conclusions ...

- In light of this presentation, it is apparent that the relevant authorities of the RoM have been engaged actively in the fulfilment of the legal obligations relating to energy statistics.
- In the Republic of Moldova there are several donors and organizations, which support the improvement of energy statistics in our country, namely: European Commission, INOGATE, Energy Community Secretariat, USAID etc. All of them have different responsibilities and tasks in the field of energy statistics.
- **It is possible to improve the quality of energy statistics data in the Republic of Moldova with common efforts of MoE, NBS, EEA, donors etc.!!!**



Thank you for attention!

Ms. Ina Cretu,
Senior Consultant on Energy Policies,
Ministry of Economy, Republic of Moldova
ina.cretu@mec.gov.md