



“Security of supply: Current outlook and future development”

Republic of Moldova

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Agenda



1. Evolution of Supply/Demand Balance
2. Energy Policy, Legal or institutional framework for Security of Supply
3. Main challenges in implementing the policy and or legal/regulatory framework
4. Identification of strategic investments/projects at national level
5. Regional coordination for Security of Supply (plans and/or projects)
6. International cooperation

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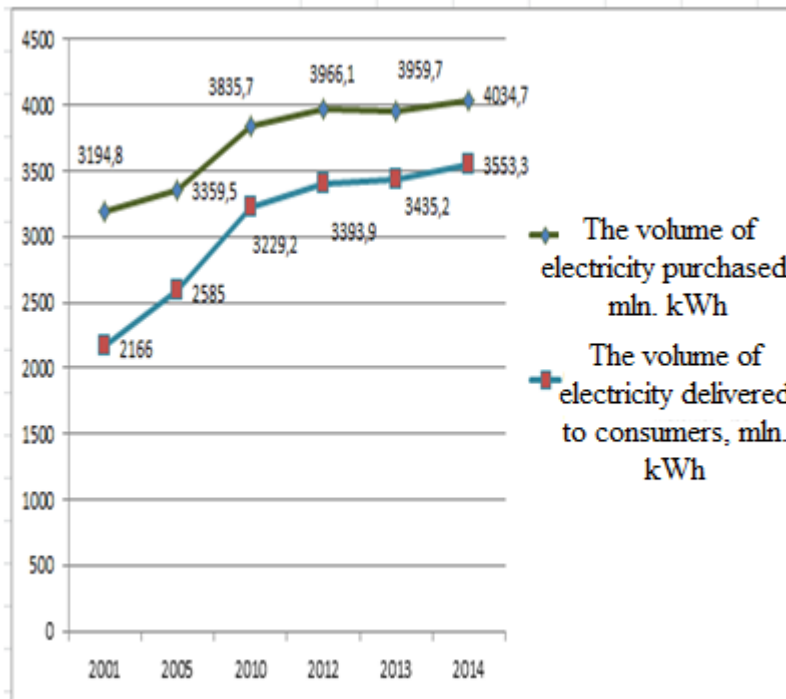


1. Evolution of Supply/Demand Balance

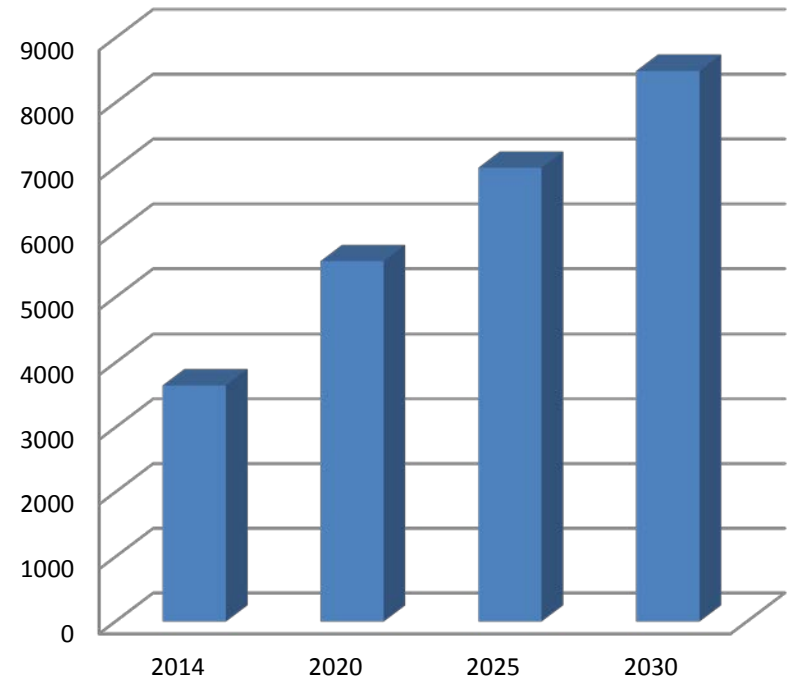
Electricity sector



Volume of electricity purchased and supplied to consumers, mil. kWh



Energy use expected in the period of 2014-2030, mil. kWh

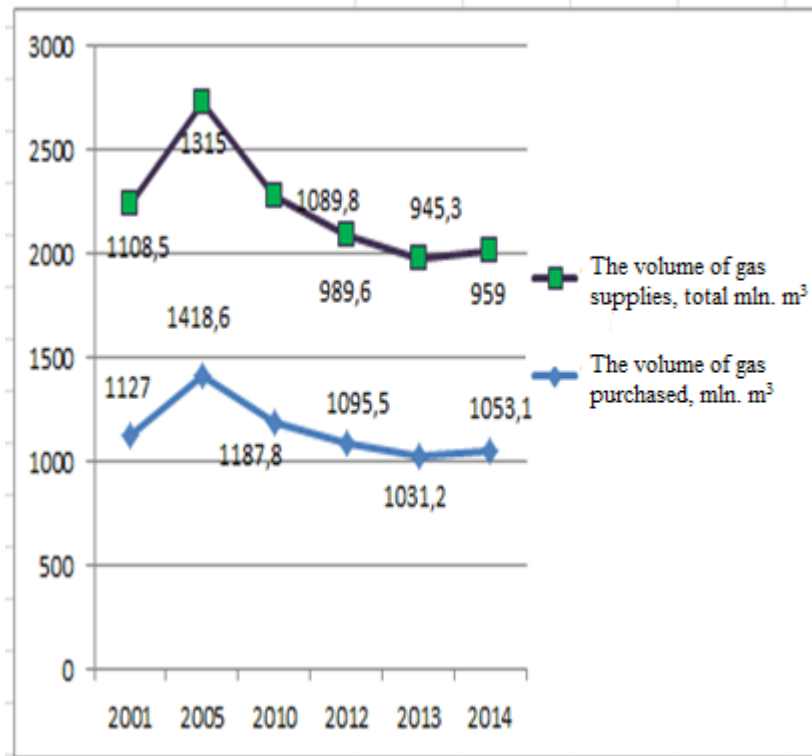


1. Evolution of Supply/Demand Balance

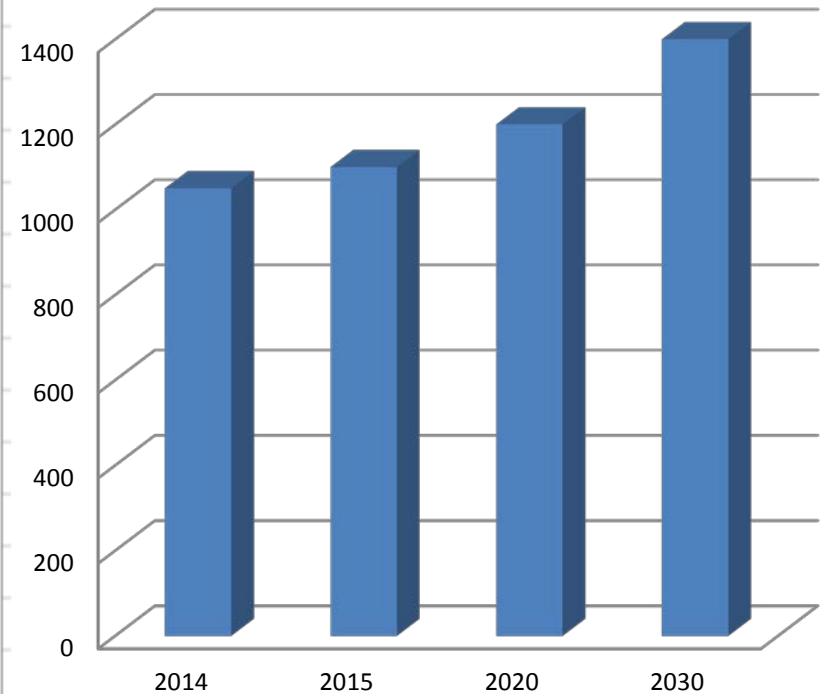


Gas sector

Volume of natural gas purchased and supplied to consumers, mil. m³



Gas import expected in the period of 2014-2030, mil. m³



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2. Energy Policy, Legal or institutional framework for Security of Supply



- The Energy Strategy of the Republic of Moldova till 2030 was approved through the Government Decision nr. 102 from 05.02.2013.
- Main objectives to ensure security of supply from the Energy Strategy till 2030 are:
 - To ensure the natural gas supply safety, by diversifying the supply routes and sources, of carrier types (conventional, non-conventional gas, LNG) and by storage facilities, together with strengthening Moldova's role of natural gas transmission corridor.
 - To strengthen Moldova's role of power transmission corridor, by building new interconnectors, connected to the ENTSO-E system, and by consolidating the internal power transmission network.
 - To create a strong power and thermal energy generation platform, through retrofitting, efficient district heating and advanced marketing.

2. Energy Policy, Legal or institutional framework for Security of Supply



- **Law on energy no. 1525 of 19.02.1998;**
- **Law on electricity no. 124 of 23.12.2009;**
- **Law on natural gas no. 123 of 23.12.2009;**
- **Law on thermal energy and promotion of cogeneration no. 92 of 29.05.2014.**

3. Main challenges in implementing the policy and or legal/regulatory framework



The challenges to security of energy supply stem from the following facts :

- transposition of the 3rd Energy Package on electricity and natural gas markets
- almost total dependence on imported primary energy resources;
- natural gas imported from only one supplier;
- lack of electricity generation capacities on the right bank of Nistru river to cover local consumption;
- insufficient capacity of interconnection electricity lines with Southeast Europe;
- the electricity transmission network requires upgrading.

The Moldovan government will continue to focus on integration with the EU energy market and to address the main challenges related to the security of supply!

4. Identification of strategic investments/projects



Electricity interconnections (MD-RO)

The following electricity interconnections projects were identified as priority ones between RoM and RO:

- **Back-to-back (BtB) station Vulcanesti and OHL 330 kV Vulcanesti-Chisinau.** The cost of project is 140 mil Euro.
- **Back-to-back (BtB) station and OHL 330/400kV Romania- Ungheni- Straseni.** The cost of this line accounts for 106 million Euro, of which: 36 million Euro are for the linear part of Romania- Ungheni- Straseni and 70 million Euro for BtB station.
- **Back-to-back (BtB) station and OHL 400kV Balti-Suceava.** The cost of this line accounts for 131,2 million Euro, of which the total cost of OHL 400 kV on the Romanian side + 50% of cost for BtB station – 68,6 million Euro and the total cost of OHL 400 kV on the Moldovan side + 50% of cost for BtB station – 62,6 million Euro.

The development of the feasibility studies for this three interconnection projects with Romania will be launched in the beginning of 2016.



4. Identification of strategic investments/projects

Iasi (RO) - Ungheni (MD) gas pipeline



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- Construction works on the new interconnector with Romania, Iasi (RO) – Ungheni (RoM) have been finished in August 2014
- Total cost – 26.5 mill. EUR, of which 9.1 mill. EUR on the Moldovan side.
- Length: 43.28 km in total, of which 10.48 km in RoM, with 736 m crossing the Prut river
- Pipeline diameter 20"; reversible operation; transport capacity: 1.5 bcm/year at 55 bar nominal pressure and a min. pressure of 16 bar on the border
- The pipeline became operational on March 4th 2015
- However, at the first stage, the RoM can use this gas pipeline only for the Ungheni district (10-12 mil m³; 1% of the total gas consumption per country)



4. Identification of strategic investments/projects



Ungheni - Chisinau (MD) gas pipeline [2nd stage]

- The next and final phase of the project is the extension of the pipeline of 130 km (Ø500mm) on the RoM territory by construction of (1) gas pipeline Ungheni-Chisinau, (2) the ring around Chisinau and of (3) a distribution / measurement station on the ring.
- The estimate cost of the project is approx. 83.7 mill. EUR.
- A Feasibility Study (FS) with ESIA is now under development with the EBRD support being planned to be finalized by Quarter II 2016.
- The Financing Agreement on the construction Ungheni-Chisinau pipeline should be signed in 2016, taking into account the support offered by EBRD, EIB, European Commission through NIF (ENPI).
- The project is envisaged to be finalized until May 2018.



4. Identification of strategic investments/projects

Interconnection of the Moldovan power system to ENTSO-E



- An MoU was signed between Moldelectrica (Republic of Moldova) and Transelectrica (Romania) in 2010 towards ENTSO-E accession.
- A joint application was submitted before the deadline of 31 March 2011 by Moldova, Ukraine and Romania to the JOP for funding the feasibility study on the conditions of Moldova and Ukraine ENTSO-E accession.
- “Phase I” and “Phase II” of the application was approved with a detailed project proposal.
- JMA of the JOP RM – UA – RO approved a €7,1 million grant for the Feasibility Study with an execution period of 30 months.
- Currently, the feasibility study on the synchronous operation of the Ukrainian and Moldovan electricity grids with the Central European grid is under development, the deadline being the end of 2015



5. Regional coordination for Security of Supply (plans and/or projects)



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1. Developing and strengthening interconnection capacity both for gas and electricity between RoM and Romania (EU), especially for PECE project OHL Balti (MD) – Suceava (RO), which is a priority one for Moldova from point of view of increasing the asynchronous interconnection capacity, and offering the possibility to import/export the electricity in both directions, including electricity transit from Ukraine.
2. Strengthening of cooperation with neighbouring countries on energy security issues, including emergencies, especially with Romania and Ukraine
3. Support to the JSC Moldova-gaz in the negotiation process and signing of a new contract on natural gas supply and transit between JSC Moldovagaz and JSC Gazprom for 2016 year.
4. More active exploration of hydrocarbons in the South of Moldova using concession policies.



6. International cooperation



I. Existent TA and FA:

- Moldelectrica Power Transmission Network Rehabilitation - EU is funding a project through the Neighbouring Investment facility (NIF) in cooperation with EBRD and EIB. This project is focusing on the rehabilitation of the existing network and has a TA component more focused in principle on the implementation of the project
- Construction of Ungheni-Chisinau gas pipeline - in order to prepare the project for the implementation the EBRD currently is developing a feasibility study, which will include the ESIA and, further, will finance the project
- Construction of electricity interconnections RoM-EU - after the finalization of Consultant selection, the EBRD will start the development of the feasibility studies in the beginning of 2016

II. Attraction of the additional technical and financial assistance in the security of supply field with donors and IFIs support:

- Development of the secondary legislation for the 3rd Energy Package [Regulation (EC) No 714/2009 and Regulation (EC) No 715/2009]
- Development of the draft law on emergency oil stocks and founding of a Central oil stockholding entity
- Support on emergencies and security of supply issues
- Support to the Central Electricity Supplier (CES) during the establishment and its initial phase of operation
- Support to the implementation of the state policy in the field of electricity transmission and strengthening of institutional capacities etc.



Спасибо!
Thank you!

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

