

STUDY

**ON THE IMPLEMENTATION
OF KEY ENERGY PROVISIONS
OF THE EU-MOLDOVA ASSOCIATION AGREEMENT**

Author: Iulian Groza
European integration policy moderator
Institute for European Policies and Reforms

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LIST OF ABBREVIATIONS

AA	Association Agreement
ANRE	National Energy Regulatory Agency
BCM	Billion Cubic Meters
CESEC	South-Eastern European Gas Connectivity
CHP	Combined Heat and Power Plant
DCFTA	Deep and Comprehensive Free Trade Area
DSO	Distributions System Operator
E5P	Eastern Europe Energy Efficiency and Environment Partnership
EIB	European Investment Bank
EBRD	European Bank for Reconstruction and Development
EEAP	Energy Efficiency Action Plan on 2013-2015
EnC	Energy Community
ENTSO-E	European Network of Transmission System Operators for Electricity
ENTSO-G	European Network of Transmission System Operators for Gas
ESMAP	Energy Sector Management Assistance Program
EU	European Union
CHP	Combined Heat and Power
HPP	Hydro Power Plant
HVL	High Voltage Line
IEM	EU Internal Energy Market
ISO	Independent System Operator
ITO	Independent Transport Operator
JSC	Joint Stock Company
UPS	Soviet Union's United Power System
LNG	Liquefied Natural Gas
LTD	Limited Company
MGRES	Moldavskaya GRES
MCM	Million Cubic Meters
MW	Megawatt
NEEP	National Energy Efficiency Program 2011-2020
NREAP	National Renewable Energy Action Plan
OU	Ownership Unbundling
TSO	Transport System Operator

EXECUTIVE SUMMARY

Moldova's energy profile is impacted by insignificant known reserves of solid fuels, oil and gas, low hydroelectric potential and poor framework of alternative sources of supply. This resulted into 96% dependency on energy imports in particular from Russia (natural gas) and Ukraine, as well as supplies from Transnistrian region (electricity). 2030 Energy Security Strategy is addressing these issues. The Membership of Moldova in the Energy Community Treaty is an important guaranty that relevant progress in the energy sector of Moldova will be ensured, though with some delays. In the last three years Moldova has considerably improved its bilateral and regional energy cooperation with Central and South-Eastern European countries, in particular Romania. The bilateral cooperation with Ukraine needs to be further explored in particular as regards the security of supply of electricity and building a more competitive common market.

Moldova does not have underground gas storages or LNG facilities and is largely dependent on supplies of natural gas from Russia (JSC Gazprom). Currently, less than 1%, is covered by domestic gas production and alternative imports. An important progress was achieved in this regard with the construction of the Iasi-Ungheni natural gas interconnector with Romania. The electricity system of Moldova operates synchronously with the Ukrainian system as part of the former Soviet Union's United Power System (UPS). This limits the current supply options and exposes the country to very significant energy security risks. Approximately 70-75% of the energy sector equipment is outdated. The gas pipeline losses are estimated at 3.3% in the distribution and 2.3% in transmission systems. The losses in the electricity distribution networks are averaged to 9%. Meanwhile, the district-heating sector in Moldova has experienced even higher level of heat losses estimated to cca. 20%. Thus the implementation of the National Energy Efficiency Program of Moldova should contribute to reaching the global energy savings target of up to 20% by 2020. At the same time, as member of the Energy Community Moldova committed to a binding target of 17% of energy from renewable sources the energy consumption mix by 2020.

Against this background Moldova concluded the Association Agreement (AA) with the EU that is already provisionally applied as of 1st of September 2014. The Agreement is underlining the commitment to further strengthen the EU-Moldova energy cooperation by enhancing the security of energy supply, facilitating the development of appropriate infrastructure, increasing market integration and regulatory approximation with the EU energy *acquis*, and promoting energy efficiency and the use of renewable energy sources.

Consequently, for the purpose of the present study a general overview of the progress in the implementation of Moldova's commitments, in particular assessing the level of transposition of the EU *acquis* in the Moldovan legal framework in the sectors of electricity, natural gas, energy efficiency and renewables. Thus, Moldova committed to transpose 43 EU Directives and Regulations relevant to the energy sector, while 12 Directives and regulations were transposed before Moldova even started provisional application of the Association Agreement in September 2014, based on its commitments in EnC. At the same time, it is important to underline that at least 4 EU directives and Regulations envisaged in the Agreement were repealed.

Energy efficiency sector seems to be most advanced in terms of transposition of legislation, if compared with natural gas or electricity sector. While the adoption of primary legislation is registering a relative progress, though with delays in transposition in particular during the last year, the adoption of effective secondary legislation still remains as a challenge. Another challenge is the practical implementation by Moldova of the transposed EU *acquis* on natural gas and electricity, given the alternative interconnection projects, as still about 96% of the energy is imported from Russia or Ukraine or is bought from power generation

capacity in Transnistrian region that also producing electricity mainly from imported natural gas.

Thus, Moldova should speed up the construction of alternative natural gas interconnections with Romania in order to benefit from a more competitive energy market of the European Union by 2018. Speeding-up the construction of electricity high voltage lines (HVL) interconnections by 2019 for the asynchronous integration with ENSTO-E via Romania should be another short-term priority for Moldovan and Romania Governments as agreed in the MoU signed in May 2015. The support of the European Union and European IFIs as well as strengthening Moldova's participation in the Central and South Eastern European energy network is crucial in this regard.

Moldovan Parliament should also ensure rapid adoption of the new Laws on Natural Gas and Electricity aiming to transpose the 3rd Energy Package as advised by the Energy Community Secretariat as its implementation is already in retard. This recommendation is also valid in terms of the transposition process of the renewable energy provisions of AA as the adoption by the Parliament of the draft law on the Promotion of Energy from Renewable Sources is pending for more than a year. A more transparent and independent activity of the National Agency for Energy Regulation is required, given the recent drawbacks related to the leadership of the Agency and lately shortcomings in the process of revision of the energy tariffs. A more predictable and transparent investment climate in the energy sector is required.

INTRODUCTION – MAPPING THE MOLDOVAN ENERGY SECTOR

Moldova's energy profile is impacted by insignificant reserves of solid fuels, oil and gas, low hydroelectric potential and poor framework of alternative sources of supply¹. This resulted into 96% dependency² on energy imports in particular from Russia (natural gas) and Ukraine, including acquisitions from Transnistrian region (electricity).

In February 2013 Moldovan Government adopted a new Energy Security Strategy 2030³ aiming to create a more efficient and secure energy environment, setting three key objectives: (1) security of energy supply; (2) development of competitive energy market and its regional and European integration; and (3) sustainable development of energy sector and combating climate change. The electricity and natural gas interconnections are key to increasing energy security and improving competitiveness. The National Energy Regulator Agency (ANRE) created in 1997⁴ is the competent authority for regulating the energy sector of Moldova equipped with regulatory competences in the gas, oil products and electricity sector. ANRE is managed by a Board of five members and is led by a Director General, all of them being appointed by the Parliament for a period from 2 to 6 years.

As of May 1st, 2010 Moldova is a member of the Energy Community Treaty⁵ and thus committed to implement the 2nd and later 3rd EU Energy Packages (i.e. EU Directives on gas (2009/73/EC) and electricity (2009/72/EC)⁶. Moldova is also aiming to integrate with (ENTSO-E)⁷ and (ENTSO⁸-G)⁹.

In 2012 a special EU-Moldova Joint Experts Group on Energy was created aiming to increase the level of the EU-Moldova interaction on energy, thus contributing to the consolidation of the energy security and efficiency in the Republic of Moldova.

The energy cooperation with Romania strengthened in the last years aiming to facilitate Moldova's integration with European Union gas and electricity grids. At the same time, the Moldovan and Romanian energy cooperation was reinforced by a special multilateral dialogue format with the participation of the European Commission, as well the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD). The accession of Moldova in October 2015¹⁰ to the Central Eastern and South-

¹ Energy Security Strategy 2030, p.63 <http://lex.justice.md/md/346670>

² <http://agora.md/stiri/6387/infografic--beneficiile-pentru-sectorul-energetic-din-moldova--dupa-implementarea-acordului-de-asociere-cu-ue>

³ Energy Security Strategy 2030, <http://lex.justice.md/md/346670/>

⁴ Government Decision from 1997 on the creation of the National Agency for Energy Regulation <http://lex.justice.md/viewdoc.php?action=view&view=doc&id=304572&lang=1>

⁵ https://www.energy-community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY/Stakeholders/Parties

⁶ Energy Community Ministerial Council Decision on the Accession of Moldova to the Energy Community Treaty https://www.energy-community.org/portal/page/portal/ENC_HOME/DOCS/490177/MC-2009_Dec_2009-03-MC-EnC_Accession_of_the_Republic_of_Moldova_to_the_EnC_Treaty_signed.pdf

⁷ The European Network of Transmission System Operators for Electricity <http://www.entsoe.eu/>

⁸ The Conclusions of the second Energy Community Ministerial Council held on 6th October 2011 in Chisinau mentioned the call by the Ministerial Council for all the Energy Community institutions to start working towards enhancing cooperation between public authorities and interested parts of the Contracting Parties to the ACER, ENTSO-E and directly with ENTSGO. <https://www.energy-community.org/pls/portal/docs/1146182.PDF>

⁹ The European Network of Transmission System Operators for Gas, <http://www.entsog.eu/>

¹⁰ MOU on a Joint approach to address the natural gas diversification and security of supply challenges as part of the CESEC initiative https://ec.europa.eu/energy/sites/ener/files/documents/CESEC%20MoU_signed.pdf

Eastern European Gas Connectivity (CESEC) Initiative¹¹ shall foster the closer integration with the EU and Energy Community energy markets. The CESEC High Level Group was launched in February 2015¹² having the goal to help improving the investment climate in the involved EU and Energy Community countries, by creating a stable regulatory and market framework in natural gas sector.

Natural gas sector

Moldova does not have underground gas storages or LNG facilities and is largely dependent on supplies of natural gas from Russia (JSC Gazprom). Less than 1%, is covered by domestic gas production and alternative imports. In Moldovan there are currently around 1600 km of gas transmission pipelines, and about 21900 km of gas distribution pipelines¹³.

The yearly natural gas consumption in Moldova is cca. 1,05 bcm/year and including the territory of the Transnistrian region is cca. 3 bcm/year¹⁴, and accounts for approx. 60% of primary energy consumption. Gas is used for 96% of production of electricity and heat. About 2/3 of the national gas consumption of 3 bcm/year is used for electricity generation in the Transnistrian region (CHP Moldavskaya GRES) and 1/5 of the consumption takes place in the capital Chisinau.

Currently, the internal gas sector activities i.e. import, supply, cross-border and national transmission, distribution and retail is mainly dominated directly or indirectly by Moldovan JSC Moldovagaz, of which JSC Gazprom owns 50%+1 shares, and manages 13,4% of its shares of the Transnistrian authorities. The transmission network operator in Moldova is LTD Moldovatransgaz, which is a subsidiary of JSC Moldovagaz. At the same time, Moldovagaz has 11 subsidiaries that operate as distribution companies and are engaged in retail supply, while another daughter company (Chisinau-Gaz) operates the distribution network in Chisinau.

A challenge for the sector is the historical debt of JSC Moldovagaz to JSC Gazprom, which currently is cca. 4,5 bln. USD¹⁵, of which more than 90% is the debt of Tiraspoltransgaz - the Transnistrian region transport operator.

¹¹ *Participating Countries: Austria, Bulgaria, Croatia, Greece, Hungary, Italy, Romania, Slovakia, Slovenia, Albania, Former Yugoslav Republic of Macedonia, Serbia, Bosnia and Herzegovina, Ukraine and Republic of Moldova*

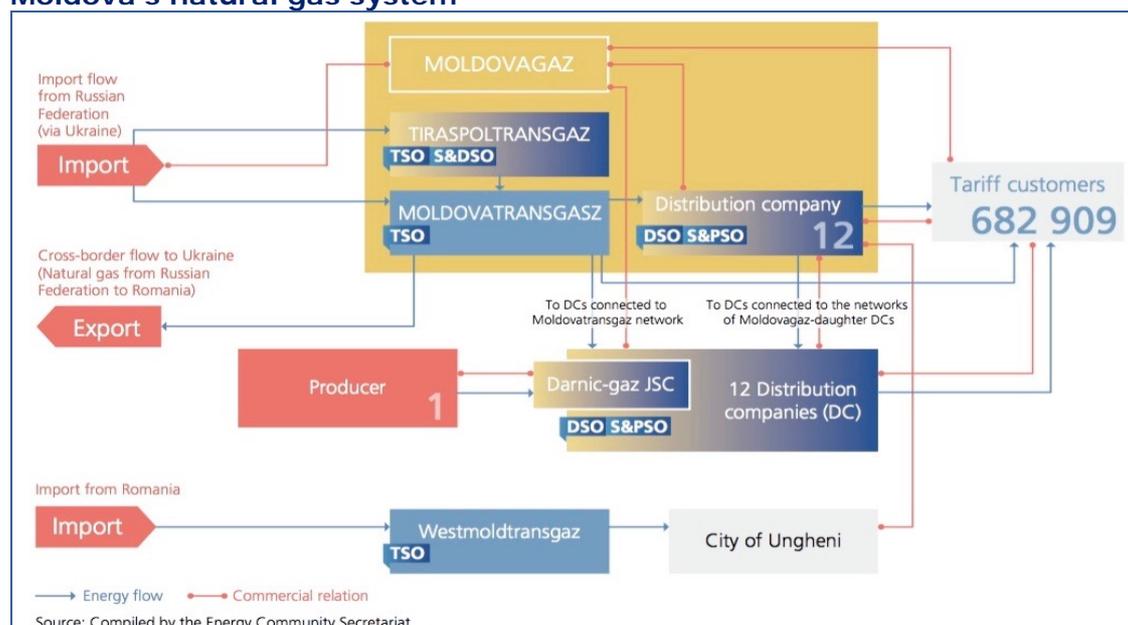
¹² <https://ec.europa.eu/energy/en/news/central-eastern-and-south-eastern-european-countries-join-forces-create-integrated-gas-market>

¹³ Energy Security Strategy 2030, p. 69

¹⁴ The Annual implementation report published by the Energy Community Secretariat, 1 September 2015, p. 135, https://www.energy-community.org/portal/page/portal/ENC_HOME/DOCS/3872267/EnC_IR2015WEB.pdf

¹⁵ Audit Report of Gazprom 2015 June 30 (286,33 Bln RUB= 4,5 bln USD (NBM official rate as of 23.11.2015)), <http://www.gazprom.ru/f/posts/26/228235/gazprom-ifrs-2q-2015-ru.pdf>

Moldova's natural gas system¹⁶



Consequently, the new natural gas interconnector Ungheni-Iași between Romania and Moldova that was built in August 2014, sets solid grounds to break the dependence on one source of supply.

However, this connection has still a limited impact as the newly created Moldovan state-owned company “WestMold-transgaz” has contracted only 1 mcm for 2015. The maximum capacity of the Ungheni-Iași interconnector is 1.5 bcm/year. In order to reach its full capacity, the Romanian and Moldovan grids need to be strengthened. In Moldova, the main objective is to build the Ungheni-Chișinau pipeline (130 km) and a pumping station. In Romania the Onești-Iași pipeline and two gas-compression stations (Onesti and Gheraiesti) should be built in order to level the pressure of the gas networks of Romania and Moldova. The main objective for the gas sector, as it was enshrined in the 2030 Energy Security Strategy is to ensure the diversification of supply roots to Moldova by 2020 the latest, when the unbundling derogation¹⁷ for the EU III energy package on gas is expiring.

The legal framework regulating the gas sector in Moldova is the natural gas Law¹⁸ adopted in December 2009 and amended in July 2014.

Electricity sector

Moldova is covering on average about 20%¹⁹ of its electricity demand from domestic generation by gas-fired, combined heat and power plants²⁰ and hydropower plants²¹. The rest is usually ensured through imports from Ukraine and by supplies from a gas-fired

¹⁶ Source: The Annual implementation report published by the Energy Community Secretariat, 1 September 2015, p. 136

¹⁷ The Energy Community Ministerial Council from December 2012 decided to offer Moldova derogation from implementation of the Article 9(1) of the EU Directive 2009/73 on gas sector, thus postponing the unbundling requirements of the transmission system operators until 1 January 2020.

¹⁸ The natural gas law <http://lex.justice.md/md/333636/>

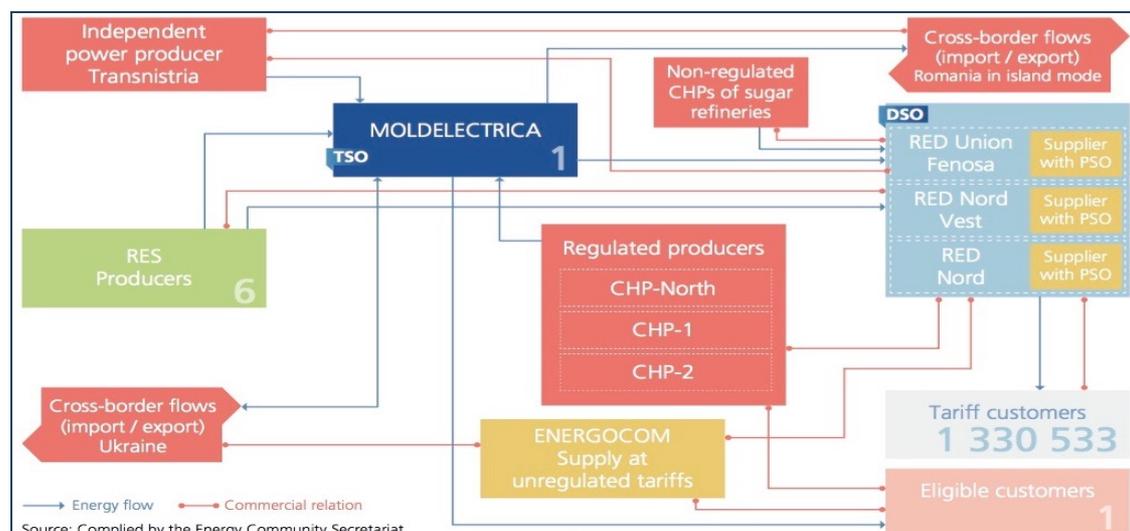
¹⁹ The total electricity consumption in 2014 was 4130 GWh, whereas the domestic production amounted 788 GWh - The Annual implementation report published by the Energy Community Secretariat, 1 September 2015, p. 131 (Table)

²⁰ Chișinau CHP-2 (240 MW power capacity, 1200 GCal/h thermal capacity); Chișinau CHP-1 (66 MW power capacity, 254 GCal/h thermal capacity) and CHP Nord, Bălți (20.4 MW power capacity, 200 GCal/h thermal capacity).

²¹ Dubăsari CHE (Hydropower Plant) (48 MW) and Costești CHE (Hydroelectric Plant) (16 MW)

thermal power generator²² situated in the Transnistrian region and owned by a Russian company Inter RAO UES.

Moldova's electricity system²³



The Moldovan state-owned company "Moldelectrica" is the transmission system operator in Moldova. The three distribution system operators in Moldova are the state-owned "RED Nord", "RED Nord-Vest", while "RED Union Fenosa" is owned by the Spanish utility "Gas Natural Fenosa". In January 2015, "Gas Natural Fenosa Furnizare Energie" and in August 2015 "Furnizare Energie Electrica Nord" were established as supply companies legally separated from distribution activities.

In 2014 the supply of electricity was ensured from Ukraine and directly from MDGRES to Moldovan REDs at a same price of 6,8 USD cents/kWh. In 2015 the imports from Ukraine were suspended and now MDGRES is the biggest supplier of electricity in Moldova, at the price of 6,795 USD cents/kWh. If in 2014 the supply from MGRES to three Moldovan REDs was organized on a direct contract, in 2015 however the supply is ensured via a chain of two Moldovan intermediary companies (MGRES-*Energokapital*-*Energocom*-REDs).

The 2030 Energy Security Strategy have established the following objectives for the electricity sector to be achieved by 2020: (1) to strengthen Moldova's role of power transmission corridor, by building new inter-connectors; (2) to connect to the ENTSO-E system (either synchronous or asynchronous); (3) to create a strong power and heat generation platform; (4) to strengthen the internal power transmission network and (4) to build a modern and competitive institutional framework²⁴.

Currently, the electricity system of Moldova operates synchronously with the Ukrainian system as part of the former Soviet Union's United Power System (UPS). Alternative electricity interconnections with the Romania are poor, thus Moldova is practically not interconnected with the EU Internal Energy Market (IEM). This limits the current supply options and exposes the country to very significant energy security risks.

In 2013 with the support of the European Commission's Joint Operational Programme Republic of Moldova-Ukraine-Romania a Feasibility Study on the Synchronous Interconnection of the Ukrainian and Moldovan Power Systems to ENTSO-E Continental

²² Cuciurgani-MGRES - CERMS (2520 MW, natural gas, fuel oil)

²³ Source: The Annual implementation report published by the Energy Community Secretariat, 1 September 2015, p. 132

²⁴ Energy Security Strategy 2030, p. 22

Europe Power System was contracted²⁵. The feasibility study had to analyze different scenarios: synchronous versus asynchronous connections with ENTSO-E.

The synchronous connection to the ENTSO-E, together with Ukraine, while maintaining the benefit of participating in the internal power market, would require at least 10-15 years in order to be implemented.

According to the 2030 Energy Security Strategy²⁶ the asynchronous connection provides the possibility to decide without constraints between buying the electricity from the Eastern or Western markets, independently of the Ukrainian market's evolution, but depending on the price level. Also, this solution provides Moldova with the commercial arbitration between the two blocks, as well as avoids the disconnection from the Ukrainian system that is connected with the UPS system, a disconnection that is considered as being very difficult from the technical point of view and very costly from the financial point of view. The asynchronous connection via Romania requires the construction of additional interconnections and mandatory installation of back-to-back stations on the connection grids in Moldova. Thus, the back-to-back solution should be based on the existent overhead line (HVL) 400kV Vulcanesti-Isaccea, as a minimal solution, with possible extensions through the other two HVLS Iași-Ungheni-Strășeni and Suceava-Bălți.

Thus, the power interconnection with Romania would ensure a diversification of electricity supply and integration with ENTSO-E, providing access to a competitive electricity market in a shorter run and with more advantages than disadvantages for the electricity independence of the Republic of Moldova.

The MoU between Moldovan and Romanian Governments signed on 21st of May 2015²⁷ had prioritized the following electricity interconnection projects that have to be operational by 2018:

- (1) construction of a HVL Vulcănești-Chișinău (Moldova) connecting to the existing HVL Isaccea-Vulcănești and a back-to-back station;
- (2) construction of a HVL Iași-Ungheni-Strășeni and a back-to-back station;
- (3) construction of a HVL Suceava-Bălți and a back-to-back station.

In the mean time, bearing in mind that the ENTSO-E feasibility study was expected in 2016²⁸, and given the preliminary findings in the framework of Moldovan-Romanian energy dialogue, the World Bank office in Moldova offered to carry out an alternative technical and economic analysis of Moldova's power sector in order to offer the best scenarios of priority asynchronous power grids interconnection with the EU via Romania. According to the World Bank Country Program Snapshot²⁹, the sector Study on Moldova's Electric Power Market Options on improving energy security by interconnection with Romania was finalised by the end of 2015, providing answers on the priority scenarios of interconnection with Romania. The project was implemented with the funding support of the Energy Sector Management Assistance Program (ESMAP)³⁰.

²⁵ https://www.entsoe.eu/Documents/SOC%20documents/Regional_Groups_Continental_Europe/Joint_operational_programme_Romania_Ukraine_Moldova_2007-2013.pdf

²⁶ Energy Security Strategy 2030, p. 28

²⁷ The Article 4 and 5 of the Memorandum of understanding between the Government of Moldova and the Government of Romania on implementation of natural gas and electricity interconnections projects.

²⁸ https://www.entsoe.eu/Documents/SOC%20documents/Regional_Groups_Continental_Europe/Joint_operational_programme_Romania_Ukraine_Moldova_2007-2013.pdf

²⁹ The World Bank Group – Moldova Partnership Country Program Snapshot, p.8

<http://www.worldbank.org/content/dam/Worldbank/document/Moldova-Snapshot.pdf>

³⁰ <https://www.esmap.org/>

The national legal framework that regulates the electricity sector is the Electricity Law of 2009³¹ as amended in 2011 and 2014, and the Energy Law of 1998³².

Energy efficiency and Renewables

According to the 2030 Energy Security Strategy, currently the energy intensity per capita in Moldova is high if to compare with other Energy Community or EU member states. Approximately 70-75%³³ of the energy sector equipment is outdated. The gas pipeline losses are estimated at 3.3%³⁴ in the distribution and 2.3% in transmission systems. The losses in the electricity distribution networks are averaged to 9%³⁵. Meanwhile, the district-heating sector in Moldova has experienced even higher level of heat losses estimated to cca. 20%³⁶. There are around 4,300 public buildings in Moldova including schools, kindergartens and hospitals. The high costs of heating in some cases exceed the budgets of the public institutions.

The Energy Efficiency Agency created in 2010 after the adoption of the Law on the Energy Efficiency³⁷ is the main public authority responsible for ensuring development in the field of energy efficiency and renewable energy sources. In 2011 the Government adopted the National Energy Efficiency Program 2011-2020 (NEEP)³⁸ and two years later a more detailed Energy Efficiency Action Plan on 2013-2015 (EEAP)³⁹ was adopted. Thus, NEEP sets up a long-term energy savings target of up to 20% by 2020. At the same time, EEAP foresees more concrete measures to complete the legal framework according to Moldova's commitments in the Energy Community and reach the intermediate energy savings target of 9% by approximately 1.8% annually until 2015.

In 2012 the Energy Efficiency Fund was created in order to support the implementation of energy efficiency objectives, including via financing projects in the area of energy efficiency and renewable energy⁴⁰. In 2014 Moldova officially joined⁴¹ the Eastern Europe Energy Efficiency and Environment Partnership (E5P)⁴² created in 2009 with the aim of improving energy efficiency and environmental protection in the Eastern Partnership region.

Moldova's *renewable energy* consumption currently consists mostly of biomass for heating. There are as well two hydropower plants⁴³ with a total installed capacity of 64 MW, or cca. 2% of total electricity generation. As member of the Energy Community Moldova committed to a binding target of 17% of energy from renewable sources the energy consumption mix by 2020⁴⁴. The National Renewable Energy Action Plan (NREAP)⁴⁵ was

³¹ The 2009 Electricity Law <http://lex.justice.md/md/333639/>

³² The 1998 Energy Law <http://lex.justice.md/md/311606/>

³³ Energy Security Strategy 2030, p. 8

³⁴

<http://anre.md/files/Acte%20Normative/cons%20publice/moldovagaz/Raport%20tarife%20gaze%20naturale.pdf>

³⁵ From 8% to 10.5%, Source: ANRE Decision 2014, <http://anre.md/files/acte/Hot.%20CA%20698%202014.pdf>

³⁶ Energy Security Strategy 2030, p. 8

³⁷ The 2010 Law on Energy Efficiency http://aee.md/images/LawRM142_Eng.pdf

³⁸ The 2011 Government Decision of the adoption of the National Program for Energy Efficiency 2011-2020 <http://lex.justice.md/viewdoc.php?action=view&view=doc&id=340940&lang=1>

³⁹ The 2013 Government Decision of the adoption of the Energy Efficiency Action Plan 2013-2015 <http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=346722>

⁴⁰ The 2012 Government Decision on the Energy Efficiency Fund <http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=343683>

⁴¹ <http://www.mec.gov.md/ro/content/moldova-adera-la-e5p-instrumentul-parteneriatului-estic-pentru-eficienta-energetica>

⁴² <http://moldova.e5p.eu/about-e5p/history-rationale/>

⁴³ Dubăsari CHE (Hydropower Plant) (48 MW) and Costești CHE (Hydroelectric Plant) (16 MW)

⁴⁴ EU Directive 2009/28/EC on the promotion of the use of energy from renewable sources

adopted by the Government in December 2013 sets a more ambitious target of 20% of renewables by 2020, being broken down into an indicative share of 10% in electricity consumption, 27% in heating and cooling and a binding share of 10% in the transport sector. According to the NREAP, additional electricity generation from renewable energy sources will mainly come from wind power, biogas, as well as solar energy. The existing legal framework for renewable energy based on the Law on Renewable Energy in force since 2007⁴⁶ has not proven its capability to attract investments.

Additionally, Moldovan commitments on energy sector are provided in the Association Agreement with the EU signed on 27th June 2014 that is already provisionally applied as of 1st of September 2014. The Agreement is underlining the commitment to further strengthen the EU-Moldova energy cooperation by enhancing the security of energy supply, facilitating the development of appropriate infrastructure, increasing market integration and regulatory approximation towards key elements of the EU *acquis*, and promoting energy efficiency and the use of renewable energy sources⁴⁷.

The main goal of the present study is to analyze the relevant energy cooperation provisions of the Association Agreement and consequently review the progress after more than one year of implementation, including given the membership of Moldova in the Energy Community. Thus, firstly the author will describe the main Moldova's AA energy related obligations enshrined in the Chapter 14, Title IV – Economic and Sectorial Cooperation; Chapter 11 and Chapter 14 from the Title V – Trade and Trade related matters. Then, in the second part of the study the respective progress will be assessed, including with reference to the level of transposition of relevant EU directives and regulations. Finally, the study will finalize with key conclusions and a set of recommendations in order to ensure full implementation of Moldova's commitments in line with the deadlines foreseen by the Association Agreement and those agreed within the Energy Community.

⁴⁵ <https://www.energy-community.org/pls/portal/docs/3044025.PDF>

⁴⁶ The 2007 law on renewable energy
<http://lex.justice.md/viewdoc.php?action=view&view=doc&id=324901&lang=1>

⁴⁷ EU-Moldova Association Agreement, Preamble http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.260.01.0004.01.ENG

I. EU-MOLDOVA ASSOCIATION AGREEMENT AND ENERGY PROVISIONS

The energy sector provisions are reflected in particular in the **Chapter 14 Energy Cooperation**⁴⁸ of the **Title IV**. Sectorial Cooperation that is also accompanied by the **Annex VIII** containing the list of EU Directives and Regulations that Moldova committed to transpose. Other provisions are included in the **Chapter 11 Trade-related to energy**⁴⁹ of the **Title V**. Trade and Trade related matters (DCFTA).

There are as well other energy related provisions such as those provided by the **Chapter 20 of the Title IV** outlining the need to intensify and ensure better coordination and cooperation on energy interconnections between countries and regions with the EU Strategy for Danube Region⁵⁰. The **Chapter 8 on Public Procurement of the Title V** is also referring to the need to ensure gradual approximation of the public procurement legislation with the EU *acquis* establishing the procurement procedures of the entities operating in the water, **energy**, transport and postal services sectors⁵¹.

Other provisions that are important to be outlined briefly herewith are those provided by the **Chapter 14 of the Title V on special Dispute Settlement mechanism for the issues related to energy**⁵², in particular transport of energy goods through the networks of the Parties of the Association Agreement. Thus, the Article 382 is establishing a clear three days deadline for enacting consultations after a request is submitted in the view of the disputes related to the interruption of transport of natural gas, oil or electricity. At this stage this provision is more for the future, as currently the natural gas and electricity interconnections between Moldova and EU (Romania) a poor. However, it offers certain guaranties for the future. The Agreement is thus provides procedures for setting⁵³ and operation⁵⁴ of a special arbitration panel for the settlement of energy related disputes, conciliation⁵⁵ and remedies⁵⁶ for urgent energy disputes.

For the purpose of the current Study, further the author will describe the energy provisions of the Chapter 14 of the Title IV (including Annex VIII of the Agreement) and Chapter 11 of the Title V as these are outlining the key Moldova's obligations to transpose EU legislation on energy matters. A detailed analysis of the level of transposition of the Energy *acquis* will be presented in the final part of the Study.

⁴⁸ Association Agreement, Articles 76 - 79

⁴⁹ Association Agreement, Articles 345 - 354

⁵⁰ Association Agreement, art. 110

⁵¹ EU Directive 2004/17/EC <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:134:0001:0113:en:PDF>

⁵² Association Agreement, Articles 382 - 389, 394

⁵³ Association Agreement, Article 385

⁵⁴ Association Agreement, Articles 386-387, 389

⁵⁵ Association Agreement, Article 388

⁵⁶ Association Agreement, Article 394

1.1. TITLE IV. SECTORAL COOPERATION, CHAPTER 14 ENERGY COOPERATION

The Chapter 14 is setting a framework of the EU-Moldova energy cooperation, within a regular dialogue⁵⁷, in particular **aiming at** energy efficiency, market integration and regulatory convergence in the energy sector, taking into account the need to ensure competitiveness and access of Moldova to a secure, environmentally sustainable and affordable energy⁵⁸.

Consequently, the Article 77 is underling the **key objectives** for the EU-Moldova cooperation on energy matters, namely:

- (a) coordination of energy strategies and policies;
- (b) development of competitive, transparent and non-discriminatory energy markets in accordance with EU standards, including obligations under the Energy Community Treaty, through regulatory reforms and through the participation in regional energy cooperation;
- (c) development of an attractive and stable investment climate by addressing institutional, legal, fiscal and other conditions;
- (d) strengthening the energy infrastructure, including projects of common interest, in order to diversify energy sources, suppliers and transportation routes, inter alia, through facilitation of loan and grant funded investments;
- (e) enhancement and strengthening of long-term stability and security of energy supply and trade, transit and transport on a mutually beneficial and non-discriminatory basis;
- (f) promotion of energy efficiency and energy saving;
- (g) reduction of emissions of greenhouse gases;
- (h) scientific and technical cooperation and exchange of information.

One of the core provisions of this Chapter is mentioned in the Article 79, which is establishing a clear **obligation for Moldova to ensure approximation of its legislation with the EU energy acquis**, referring to the Annex VIII⁵⁹ of the Agreement that outlines 43 EU Directives and Regulations⁶⁰ in the sectors of electricity, natural gas, oil, energy infrastructure, energy efficiency and renewables that need to be transposed largely by 2017.

⁵⁷ Association Agreement, Article 78

⁵⁸ Association Agreement, Article 76

⁵⁹ Association Agreement, Annex VIII http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2014.260.01.0004.01.ENG

⁶⁰ The annex VIII listed 44 EU Directives and Regulations, however the EU Directive 2004/67/EC was repealed by Regulation (EU) No 994/2010 concerning measures to safeguard security of gas supply

Electricity Sector

Moldova committed within the Energy Community **to transpose by 01.01.2015**⁶¹ two EU Directives and one EU regulation related to the electricity sector that are referring in particular to:

- a) the common rules for the internal market in electricity (part of the 3rd EU energy Package)⁶²;
- b) the measures to safeguard security of electricity supply and infrastructure investment⁶³;
- c) the conditions for access to the network for cross-border exchanges in electricity⁶⁴

Natural Gas

As part of commitment within the Energy Community Moldova had to **transpose by 01.01.2015**⁶⁵ the EU Directive on common rules for the internal market in natural gas (part of the 3rd EU energy Package)⁶⁶ and the EU Regulation on conditions of access to the natural gas transmission networks⁶⁷. The EU Directive 2004/67/EC concerning the measures to safeguard security of natural gas supply the measures was repealed by the EU Regulation⁶⁸ concerning measures to safeguard security of gas supply and needs **to be transposed by 31.12.2015**.

Oil sector

There is only one EU Directive⁶⁹ that Moldova has to fully **transpose by 01.01.2023** as agreed within the Energy Community and this is referring to the obligation to maintain minimum stocks of crude oil and/or petroleum products.

Energy infrastructure

Moldova committed **to transpose by 01.01.2017** the EU Regulation concerning the notification to the Commission of investment projects in energy infrastructure⁷⁰.

⁶¹ https://www.energy-community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY/Legal/EU_Legislation#Electricity

⁶² Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity repealing Directive 2003/54/EC

⁶³ Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment

⁶⁴ Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity

⁶⁵ https://www.energy-community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY/Legal/EU_Legislation#Gas

⁶⁶ Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas, repealing Directive 2003/55/EC

⁶⁷ Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions of access to the natural gas transmission networks

⁶⁸ Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply

⁶⁹ Council Directive 2009/119/EC of 14 September 2009 imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products

⁷⁰ Council Regulation (EU, Euratom) No 617/2010 of 24 June 2010 concerning the notification to the Commission of investment projects in energy infrastructure within the European Union

Prospection and exploration of hydrocarbons

Moldova committed **to transpose by 01.01.2017** the provisions of the EU Directive outlining the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons⁷¹.

Energy efficiency

Moldova committed **to transpose by 01.01.2017**:

- a) **three** EU Directives on promotion of cogeneration based on a useful heat demand in the internal energy market⁷², on the promotion of clean and energy-efficient road transport vehicles⁷³ and on establishing a framework for the setting eco-design requirements for energy-related products⁷⁴;
- b) **two** EU Regulations on energy-efficiency labelling programme for office equipment⁷⁵ and the labelling of tyres with respect to fuel efficiency and other essential parameters⁷⁶;
- c) **three** EU Decisions on the coordination of energy-efficiency labelling programmes for office equipment⁷⁷, establishing detailed guidelines for the implementation and application of Annex II to Directive 2004/8/EC on the promotion of cogeneration⁷⁸ and on establishing harmonised efficiency reference values for separate production of electricity and heat⁷⁹;
- d) **eleven** EU Directives on implementing the EU Directive 92/75/EEC with regard to energy labelling of household electric refrigerators, freezers and their combinations⁸⁰;
- e) **ten** EU Regulations on Implementing the EU Directive 2005/32/EC on the eco-design requirements for no-load condition electric power consumption and average active efficiency of external power supplies⁸¹;
- f) **one** EU Decision on efficiency requirements for new hot-water boilers fired with liquid or gaseous fuels⁸².

⁷¹ Directive 94/22/EC of the European Parliament and of the Council of 30 May 1994 on the conditions for granting and using authorisations for the prospection, exploration and production of hydrocarbons

⁷² Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market

⁷³ Directive 2009/33/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of clean and energy-efficient road transport vehicles

⁷⁴ Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 on establishing a framework for the setting eco-design requirements for energy-related products

⁷⁵ Regulation (EC) No 106/2008 of the European Parliament and of the Council of 15 January 2008 on a Community energy-efficiency labelling programme for office equipment

⁷⁶ Regulation (EC) No 1222/2009 of the European Parliament and of the Council of 25 November 2009 on the labelling of tyres with respect to fuel efficiency and other essential parameters

⁷⁷ Council Decision No 2006/1005/EC of 18 December 2006 concerning conclusion of the Agreement between the Government of the United States of America and the European Community on the coordination of energy-efficiency labelling programmes for office equipment

⁷⁸ Commission Decision of 19 November 2008 establishing detailed guidelines for the implementation and application of Annex II to Directive 2004/8/EC of the European Parliament and of the Council (2008/952/EC)

⁷⁹ Commission Decision of 21 December 2006 establishing harmonised efficiency reference values for separate production of electricity and heat in application of Directive 2004/8/EC of the European Parliament and of the Council (2007/74/EC)

⁸⁰ see Annex 1 to the Study, Table on the status of implementation of the Energy EU acquis

⁸¹ see Annex 1 to the Study, Table on the status of implementation of the Energy EU acquis

Additionally, due to previous Moldova's commitment within Energy Community (1) one EU Directive on the energy performance of buildings **had to be transposed by 30.09.2012**⁸³ and (2) another EU Directive on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products **had to be transposed by 31.12.2011**⁸⁴.

Renewable energy

Within the framework of the Energy Community Moldova had to **transpose by 01.01.2014**⁸⁵ the EU Directive on the promotion of the use of energy from renewable energy sources⁸⁶.

1.2. TITLE V – TRADE-RELATED ENERGY COOPERATION (DCFTA), CHAPTER 11 TRADE-RELATED ENERGY

The Title V of the Association Agreement in a nutshell is referring to the creation of a Deep and Comprehensive Free Trade Area between Moldova and the EU. The Chapter 11 of the Title V contains energy trade-related issues that refer in particular to the methodology of regulated prices for energy⁸⁷, conditions to be respected in terms of the transport and transit of electricity and natural gas⁸⁸, and the role of the national regulatory authority for electricity and natural gas⁸⁹. The Article 345 of the Chapter 11 is offering as well a set of definitions⁹⁰. Further, key provisions and obligations for Moldova outlined in this Chapter will be presented.

Methodology of regulated prices for energy

The general rule of the EU 3rd Energy Package, provided as well in the Protocol of Accession of the Republic of Moldova to Energy Community Treaty⁹¹, is that only the prices for the supply of natural gas and electricity to household customers could be regulated as a public service obligation. For the non-household costumers the prices shall be determined solely by supply and demand. Thus, the non-household customers shall be free to negotiate and sign a contract with any alternative supplier.

However, the Article 346 establishes a derogation to this obligation⁹², underlining that a Party (hereinafter either Moldova or EU) may impose on undertakings, in the general

⁸² Council Directive 92/42/EEC of 21 May 1992 on efficiency requirements for new hot-water boilers fired with liquid or gaseous fuels

⁸³ Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings

⁸⁴ Directive 2010/30/EU of the European Parliament and of the Council of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products

⁸⁵ https://www.energy-community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY/Legal/EU_Legislation#RES

⁸⁶ Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable energy sources

⁸⁷ Association Agreement, Articles 346-347

⁸⁸ Association Agreement, Articles 348-352

⁸⁹ Association Agreement, Articles 353

⁹⁰ Thus "energy goods" are described as crude oil, natural gas and electrical energy. The "fixed infrastructure" is defined as any transmission or distribution network, liquefied natural gas (LNG) facility or storage facility. "Transport" is defined as transmission and distribution. "Unauthorised taking" means any activity consisting of the unlawful taking of energy goods from fixed infrastructure.

⁹¹ Protocol concerning the Accession of the Republic of Moldova to the Energy Community, <https://www.energy-community.org/pls/portal/docs/576178.PDF>

⁹² Association Agreement, Article 346, para. 2

economic interest⁹³, an obligation, which relates to the regulated price of natural gas and electricity⁹⁴.

At the same time, the para. 2 of the Article 346 is further providing that in case the non-household customers are not able to agree with a supplier on a price for electricity or natural gas that is lower than or equal to the regulated price, **non-household customers shall have the right to enter into a contract for the supply of electricity or natural gas with a supplier against the regulated price applicable**. Thus, in case a Party of the Agreement is imposing an obligation as described above it shall be ensured that the respective obligation is clearly defined, transparent, proportionate, non-discriminatory, verifiable and of limited duration. When imposing any such obligation, the Party shall also guarantee equality of access for other undertakings to consumers⁹⁵. Moreover, the para. 4 of the Article 346 provides that the methodology underlying the calculation of the regulated price is published prior to the entry into force of the regulated price.

The Agreement also establishes a prohibition for dual pricing⁹⁶. Thus, the relevant regulatory authority of a Party shall not adopt or maintain a measure resulting in a higher price for exports of energy goods to the other Party than the price charged for such goods when intended for domestic consumption⁹⁷.

Transport and transit of electricity and natural gas

As regards the transport and the third party access to fixed infrastructure, the Article 349 is reconfirming the obligation for Moldova to adapt its national legislation to the relevant EU Directives and Regulations in the sector of the natural gas and electricity, in order to ensure that the tariffs, the capacity allocation procedures and all other conditions are objective, reasonable and transparent and that they do not discriminate on the basis of origin, ownership or destination of the electricity or gas.

As transit of energy goods is concerned **Moldova should** take all appropriate measures:

- a) to **facilitate transit**⁹⁸, **consistent with the principle of freedom of transit**, as provided by the Articles V.1, V.2, V.4 and V.5 of GATT 1994⁹⁹ and Articles 7.1 and 7.3 of the Energy Charter Treaty¹⁰⁰, which are an integral part of the Association Agreement;
- b) **to prohibit and address any unauthorized taking** of energy goods in transit through its territory by any entity subject to that Moldova's control or jurisdiction¹⁰¹.

⁹³ The European Commission is defining the services of general economic interests as economic activities that public authorities identify as being of particular importance to citizens and that would not be supplied (or would be supplied under different conditions) if there were no public intervention, as defined by the EC Communication on the Quality Framework for Services of General Interest in Europe, p.3. http://ec.europa.eu/services_general_interest/docs/comm_quality_framework_en.pdf

⁹⁴ The European Commission is defining the services of general economic interests as economic activities that public authorities identify as being of particular importance to citizens and that would not be supplied (or would be supplied under different conditions) if there were no public intervention, as defined by the EC Communication on the Quality Framework for Services of General Interest in Europe, p.3. http://ec.europa.eu/services_general_interest/docs/comm_quality_framework_en.pdf

⁹⁵ Association Agreement, Article 346, para. 3

⁹⁶ Association Agreement, Article 347

⁹⁷ Association Agreement, Article 347

⁹⁸ Association Agreement, Article 348

⁹⁹ General Agreement on Tariffs and Trade 1994, https://www.wto.org/english/docs_e/legal_e/06-gatt_e.htm

¹⁰⁰ The Energy Charter Treaty <http://www.energycharter.org/fileadmin/DocumentsMedia/Legal/ECTC-en.pdf>

¹⁰¹ The Association Agreement, Article 350

- c) to ensure uninterrupted transit through its territory¹⁰², including during possible disputes on the matter. At the same time, any Party of the Agreement shall not be held liable for an interruption or reduction of transit as a result of actions of a third country or an entity under the control or jurisdiction of a third country.
- d) Moldova should also ensure that fixed infrastructure operators take any necessary measures to (a) minimize the risk of accidental interruption or reduction of transit; and (b) to restore the normal operation of such transit¹⁰³.

Regulatory authority¹⁰⁴

The Agreement reconfirms the commitment of Moldova, as provided by the 2nd and respectively 3rd EU energy package, to ensure that the national energy regulatory authority is legally distinct and functionally independent from any other public or private entity, and shall be sufficiently empowered to ensure effective competition and the efficient functioning of the market. Thus, the decisions and procedures applied by the energy regulator shall be impartial with respect to all market participants.

If an operator is affected by a decision of a regulatory authority, it shall have the right to appeal against the respective decision to an appeal body that is independent of the parties involved. The appeal body can be of judicial or non-judicial character. However, where a written decision is issued by a non-judicial appeal body in character, the respective decision shall in turn be subject to a review by an impartial and independent judicial authority. The final appeal decisions shall be effectively enforced.

Energy Community Treaty

The Article 354 is outlining that in case of a conflict in the application the provisions of the Energy Community Treaty or EU *acquis* agreed in the framework of the Energy Community shall prevail over the provisions of the Chapter 11 of the Agreement. In implementing the provisions of the Agreement, Moldova shall give preference to the adoption of legislation, which are consistent with the Energy Community Treaty or are based on the legislation applicable in the EU.

¹⁰² The Association Agreement, Article 351

¹⁰³ The Association Agreement, Article 351

¹⁰⁴ The Association Agreement, Article 352

II. PROGRESS IN THE IMPLEMENTATION OF ENERGY PROVISIONS OF THE EU-MOLDOVA ASSOCIATION AGREEMENT

Against the background presented above on the key Energy provisions of the Association Agreement, further for the purpose of the present study a general overview of the progress in the implementation of Moldova's commitments in the energy sector will be presented. Then before concluding and presenting recommendations on the next steps, a more detailed assessment of the process of transposition of the EU energy *acquis* in the Moldovan legal framework will be described focusing in particular on the progress in the sectors of electricity, natural gas, energy efficiency and renewables.

2.1 GENERAL OVERVIEW OF THE PROGRESS

Overall if to make a general overview of the progress achieved in the energy sector so far, the membership of Moldova in the Energy Community had definitely laid good grounds for a smoother implementation of the EU Energy *acquis* as provided in the Association Agreement. However, due to internal political instability over the last year, some processes were delayed.

The latest assessment of the Energy Community¹⁰⁵ is outlining a good progress in the area of energy efficiency as the majority of the transposed directives refer to these sectors. As of January 2015 Moldova is largely complying with EU requirements on monthly energy statistics, however the monthly energy statistics are still not made available to public in due time. The only remaining issue to be addressed in the dialogue with the EU is to facilitate submission of Moldovan monthly energy data to EUROSTAT. Another positive development in implementing Energy Community commitments is that Moldovan Government has adopted in August 2015¹⁰⁶ the prospective for the energy balance of the Republic of Moldova in 2015, required by the EU Regulation 1099/2008 on energy statistics¹⁰⁷

At the same time, although Moldova managed to adopt the National Plan for Renewable Energy in 2013, setting an ambitious target of 20% for energy saving by 2020, the legal framework is still full of gaps and not attractive for investments in this sector as the existing remuneration scheme for electricity or biofuels generated from renewable sources differs from the usually applicable support schemes such as feed-in-tariff or green certificates. In this regards, the adoption of the new law on promotion of energy from renewable sources and development of a methodology for support schemes for renewable energy projects based on tendering should be the absolute priority.

Moldova is rather behind the schedule in the implementation of the natural gas and electricity provisions of the 3rd EU Energy package. The deadline expired on the 1st January 2015. The new electricity and natural gas laws, which were drafted with the EU support (INOGATE¹⁰⁸), were approved by the Government and are pending adoption by the parliament by the end of 2015. At the same time, a new draft law

¹⁰⁵ *The Annual implementation report published by the Energy Community Secretariat, 1 September 2015, https://www.energy-community.org/portal/page/portal/ENC_HOME/DOCS/3872267/EnC_IR2015WEB.pdf*

¹⁰⁶ *The Government Decision on the 2015 Energy Balance of Moldova http://www.mec.gov.md/sites/default/files/intr02_34.pdf*

¹⁰⁷ *Regulation (EC) No 1099/2008 on energy statistics <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32008R1099>*

¹⁰⁸ <http://www.inogate.org/>

on the energy sector was drafted with INOGATE support, which is as well aiming to transpose the 3rd energy package. A relative progress in the compliance with provisions from the 2nd energy Package have been ensured by Moldova in particular in the electricity sector and to a smaller extend in the gas sector as the restructuring process of Moldovagaz Company is still pending. Thus, the adoption of the new laws on electricity and natural gas, and further implementation remains crucial.

In terms of the energy infrastructure the construction completion in August 2014 of the natural gas pipeline interconnection Ungheni-Iasi was an important achievement. Although with short delay the interconnection started to be operational as of March 2015 it covers only less than 1% of the natural gas consumption of Moldova. In order to reach its full capacity other investments in the gas network in Romania and Moldova are needed. Construction in Moldova of HVL electricity interconnection with Romania also is of particular importance. Thus, in May 2015, the Moldovan and Romania Governments concluded a Memorandum of Understanding (MoU) on priority energy interconnections¹⁰⁹ that outlined the natural gas and electricity projects. The total budget necessary of the projects is estimated to 750 million euros, of which 421 million euros on Moldova's territory¹¹⁰. It is expected that the projects will be implemented with the financial support of the European Union and relevant European investment institutions (i.e. EIB/EBRD). In June 2015 Moldovan Government adopted separate priority road maps¹¹¹, one for the implementation of the electricity interconnection project by mid 2019 and second on the natural gas projects that needs to be operational in 2018.

Finally, assessing the latest developments and activity of the National Agency for Energy Regulation (ANRE-Moldovan energy regulator) Moldova has to ensure that its competences are reviewed in line with the set of regulatory powers and objectives foreseen under the 3rd EU Energy Package. Interventions in the activity of ANRE related to the autonomous and independent decision making process have to be avoided by other Moldovan authorities.

2.2 TRANSPOSITION ASSESSMENT EU DIRECTIVES/REGULATIONS AND OBLIGATIONS

All in all, Moldova has committed to gradually approximate 43 EU Directives and Regulation¹¹². Due to prior commitments as member of the Energy Community at least 12 EU Directives and Regulations¹¹³ were already totally or partially transposed in the Moldova legislation in 2014. This is mainly relevant to the energy efficiency provisions. The biggest delays are registered in the electricity and natural gas sectors due to a pending adoption of the laws transposing the 3rd energy package. Thus, further the author will refer to the level of transposition of the EU Directives and Regulations enshrined in the Annex VIII of the Association Agreement especially in the area of electricity, natural gas, energy efficiency and renewables as this sectors are of highest urgency in the energy sector of the Republic of Moldova.

¹⁰⁹ Memorandum of understanding between the Government of Moldova and the Government of Romania on implementation of natural gas and electricity interconnections projects, signed on 21 May 2015 in Chişinău, http://www.dsclx.ro/legislatie/2015/septembrie2015/mo2015_691.htm

¹¹⁰ Press Release of the Moldovan Government on the occasion of signature of the MoU: <http://www.gov.md/en/content/moldova-romania-sign-memorandum-iasi-ungheni-gas-pipeline-expanding>

¹¹¹ The 2015 Government Decision approving the the priority energy roadmaps 2015-2030, <http://lex.justice.md/index.php?action=view&view=doc&lang=1&id=359712>

¹¹² see Annex 1 to the Study, Table on the status of implementation of the Energy EU acquis

¹¹³ *idem*, see Annex 1

Natural Gas sector

Moldova failed to meet the 1st January 2015 deadline for the transposition of the EU Directive 2009/73/EC¹¹⁴ and the Regulation 715/2009¹¹⁵ (i.e. 3rd Energy package in the gas sector) as committed within the Energy Community¹¹⁶. At the same time, the deadline to transpose the EU Regulation 994/2010¹¹⁷ concerning the safeguard measures for the security of gas supply is still open until the end of 2015.

On the October 28, 2015 the Government approved¹¹⁸ the new draft law on natural gas and currently is pending¹¹⁹ adoption by the Parliament. This draft law was prepared with the support of the Energy Community Secretariat and submitted to Moldovan authorities in 2014 for additional evaluation in order to initiate necessary legislative procedures for adoption. The Law is aiming to fully transposing the EU Directive 2009/73/EC¹²⁰ and the Regulation 715/2009¹²¹. Further, for the purpose of the present study a brief assessment of the level of transposition of the above-mentioned EU Directives and Regulations will be presented.

According to the preliminary screening¹²² done in 2015 out of 54 articles of the EU Directive/2009/73/EC, 13 articles do not need to be transposed in the Moldovan legislation as these refer to provisions exclusively attributed to EU member states. Five articles were already transposed in the 2009 natural gas Law. Other 25 articles of the Directive are partially transposed and 12 articles are not currently transposed. As for the EU Regulation 715/2009 out of 32 articles, 17 articles are not applicable for the Republic of Moldova. Fifteen articles of the Regulation are not transposed and five articles are implemented only partially. Finally, the EU Regulation 994/2010 is not transposed at all in the Moldovan legislation

Consequently, referring to the content of the new draft law on natural gas, it transposes the EU Directive/2009/73/EC and the EU Regulation 715/2009. This draft law is largely based on the provisions of the 2009 gas law that are completed by the new provisions of the 3rd Energy package.

From the outset all the definitions, objectives and general principles as provided in the EU gas *acquis* are fully transposed in the new draft law. The law is clearly defining (1) process of organization and functioning of the natural gas sector, (2) the market access principles, (3) the criteria and applicable procedures for the licensing of the transport, distribution, supply and storage activities in the natural gas sector, as well as the (4) way of operation of the closed distribution system.

¹¹⁴Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas, repealing Directive 2003/55/EC

¹¹⁵Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions of access to the natural gas transmission networks

¹¹⁶ https://www.energy-community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY/Legal/EU_Legislation#Gas

¹¹⁷Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply

¹¹⁸ Government Decision approving the draft natural gas Law
http://gov.md/sites/default/files/document/attachments/intr35_0.pdf

¹¹⁹ The legislative plan for transposition of the provisions of the EU-Moldova Association Agreement
<http://www.parlament.md/LinkClick.aspx?fileticket=JQPOYhNGO2A%3D&tabid=203&language=ro-RO>

¹²⁰Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas, repealing Directive 2003/55/EC

¹²¹Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions of access to the natural gas transmission networks

¹²² <http://particip.gov.md/proiectview.php?l=ro&idd=2512>

Thus, the draft law transposes the provisions related to the transmission network ownership ensuring the need for the separation of supply and production activities from network operation. Moreover, unlike the 2009 gas law, the new draft law is not limited only to the legal independence of the system transport operator from the companies undertaking production or supply activities. It goes further describing all the requirements in order to ensure effective independence of the transport system operator. Thus, the same operator will not have the right to exercise direct or indirect control over transport, distribution and supply of natural gas. All these activities will have to be separated. The new draft law is not limiting the options of unbundling, but rather is providing the legal framework for using one of the three unbundling possibilities foreseen as well by the EU Directive 2009/73/EC i.e. (1) full ownership unbundling (OU), (2) independent system operator (ISO) or independent transmission operator (ITO). At the same time, given the existing derogation offered to Moldova within the Energy Community, the draft law is clearly providing the requirements and conditions for the preparation of the unbundling implementation by 1st January 2020 applying one of the three options.

The draft law is also describing the procedures for imposing the public service obligation in case of the general economic interest, related to the security of supply, including the regularization, quality and the prices for the supplied natural gas. The law establishes that the obligations should be clearly defined, transparent, non-discriminatory, verifiable and ensure to the natural gas sector EU companies equal access to the national consumers. All the consumers connected to the gas transmission network will have the right to buy the natural gas from any supplier, as well as to change at any time the supplier respecting the contractual provisions.

The draft law is also providing guarantees for the consumer protection and ensures the protection of vulnerable consumers. The draft law transposes the provisions of the Regulation 715/2009 on the regional cooperation and cross-border flows aiming at ensuring free access to the transport networks of natural gas, including cross-border natural gas exchanges. This is in particular relevant if to refer to the effective operation of the new gas pipeline interconnector with Romania in the situation when the main TSO (Moldovatransgaz) is still not separated effectively from Moldovagaz, which is the main natural gas supplier in Moldova.

Another important provision transposed in the new draft law is clearly defining that the network operator has the right to refuse access to the transport or distribution pipelines only in three cases i.e. (1) when such a network is not physically in place, (2) when the network does not satisfy the requirements of the supplier or (3) when access is limited due to imposed public service obligation. The transparency of the procedures, requirements, criteria of access to the network, as well as the obligations of the system operator, tariffs and conditions of refusal are also stipulated by the new law. The law is also transposing fully the provisions related to the supply of natural gas, related to the organization of the supply activity, including clear regulation of the relationship of the supply company with the network operator and with the consumer.

The draft law also is reinforcing the independence of the National Agency for Energy Regulation and outlining the extended competences according to the EU Directive, including the possibility to apply financial sanctions amounting up to 10% of the yearly turnover of the companies operating in the natural gas sector for failure to comply with their obligations provided by the law.

Electricity sector

The existent electricity legal framework of Moldova (i.e. The Electricity Law of 2009¹²³ as amended in 2011 and 2014, and the Energy Law of 1998¹²⁴) generally complies with the EU repealed Directive 2003/54/EC (2nd Energy Package), however it fails to comply with the provisions of the EU Directive 2005/89/EC, and Directive 2009/72/EC^{125, 126} and the EU Regulation 714/2009¹²⁷, the latest two also referred to as 3rd EU energy package. The new Electricity Law was approved¹²⁸ by the Government on the 7th October 2015 and now is pending¹²⁹ adoption by the Parliament with relative delay as the deadline agreed within the Energy Community expired.

The preliminary screening¹³⁰ of the transposition of the EU electricity *acquis* in the Moldovan legislation outlines that out of 51 articles of the EU Directive 2009/72/EC, 15 articles are not applicable for the Republic of Moldova, these are the articles dedicated to the EU member states. Four articles are fully transposed and 32 articles are not transposed or only partially transposed. At the same time out of 26 articles of the EU Regulation 714/2009, 13 articles do not need to be transposed in Moldovan law and other 18 articles are not transposed.

If to refer now to the new draft law on electricity, it is aiming to transpose fully the rules for the production, supply, transport and distribution of electricity, protection of household and non-household consumers, ensuring a competitive market, as well as transparent norms related to the organization and functioning of the electricity sector. Thus, in order to avoid repetition with the previous part that described key transposed provisions in the draft law on the natural gas, further referring to the new draft law on electricity the author will outline in particular issues related to the authorization of the production of the electricity, unbundling, eligibility and market opening.

The *authorization procedure for new capacities* of electricity production as envisaged by the article 7 of the EU Directive 2009/72/EC is transposed in the Chapter VI of the draft law. Thus, it regulates the procedures for granting authorizations for new low power generation capacities in accordance of the objective, non-discriminatory and transparent principles the All the criteria for granting authorizations for the construction of generating capacity are also envisaged in the Article 20 of the draft law. The tendering procedure in order to ensure security of energy supply is described in the article 21 of the draft law.

Currently, the transmission system operator is a state-owned enterprise (Moldelectrica), legally unbundled from generation and supply activities in Moldova. The electricity distribution companies are legally separated from supply activities. The electricity supply companies are supplying customers at regulated tariffs. The draft Electricity Law transposes the ownership unbundling model for the

¹²³ The 2009 Electricity Law <http://lex.justice.md/md/333639/>

¹²⁴ The 1998 Energy Law <http://lex.justice.md/md/311606/>

¹²⁵ Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity repealing Directive 2003/54/EC

¹²⁶ Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment

¹²⁷ Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity

¹²⁸ Government Decision approving the draft Electricity Law, http://gov.md/sites/default/files/document/attachments/intr03_37.pdf

¹²⁹ The legislative plan for transposition of the provisions of the EU-Moldova Association Agreement <http://www.parlament.md/LinkClick.aspx?fileticket=JQPOYhNGO2A%3D&tabid=203&language=ro-RO>

¹³⁰ <http://www.particip.gov.md/proiectview.php?l=ro&idd=2332>

transmission system operator and the conditions for its certification in accordance with the provisions of the Article 9 of the EU Directive 2009/72/EC. The eligibility requirements have been transposed in the 2009 Electricity Law currently in force, although it contains a provision establishing a sub-customer category, which is not meeting the eligibility conditions. Thus, the new draft law will exclude this provision by transposing the concept of closed distribution systems as provided by the Article 28 of the EU Directive 2009/72/EC.

The electricity market in Moldova is highly dependent on a single power generation source, which is the power plant from Transnistrian Region, as the imports from Ukraine where temporally suspended. In the situation when the construction of new power grids with Romania could be finalized by the end of the year 2019, any attempt to create in the meantime a competition on the wholesale market is challenging, even if this objective is already present in the 2009 Electricity Law and is to be transposed in the new draft law as well. Thus, when adopted the new electricity law will considerably contribute to the liberalization of the electricity market, increasing the competitiveness. The final consumers shall benefit from the right to choose the with electricity supplier, based on negotiated prices. More transparency to the process of approving tariffs needs to be ensured.

Energy efficiency

The energy efficiency component of the Energy Policy commitments Moldova undertook under the Association Agreement may be found in Annex no. VIII of the Agreement, corresponding to the general provisions of Chapter 14 of Title V.

The commitments under Chapter 14 with respect to Energy Efficiency comprise 18 Directives, 12 Regulations and 3 Decisions, which need to be transposed largely by 2012 and some by 2017, namely:

- a) Directive 2010/30/EU on energy labeling and 12 implementing Directives on labeling of various energy consumption products had to be transposed by 31.12.2011, as agreed within the commitments under the European Energy Community
- b) Directive 2010/31/EU on energy efficiency of buildings had to be transposed by 31.09.2012, as agreed within the commitments under the European Energy Community
- c) The other 5 Directives, 12 Regulations and 3 Decisions have time limit of transposition of 3 years since the entry in force of the Association Agreement, i.e. until 1 September 2017.

Below we shall present some results referring to the current level of transposition of the EU legislation on energy efficiency into national legislation.

Directive 2010/30/EU on energy labeling was transposed into national legislation by means of approval of the Law on labeling of products with an energy impact¹³¹. Additionally, the Government approved implementing regulations¹³² for five types of energy impact products, essentially transposing five implementing EU Directives regulating the labeling of five types of energy consumption products. It must be mentioned that the Government Decision transposed the successor Directives, not the ones mentioned in Annex VIII, thus ensuring an up-to-date transposition of the corresponding EU legislation.

Directive 2010/31/EU on energy efficiency of buildings was transposed by means of Law on energy performance of buildings.¹³³

Both Directives 2010/30/EU and 2010/31/EU as well as the former's implementing Directives have been transposed after the set deadline under the commitments within the European Energy Community. Other three types of energy consumption products are still pending appropriate labeling regulation: refrigerators, household dishwashers and household combined washer-driers. Note that some of the implementing EU Directives on energy labeling have been repealed with newer ones, which regulated combined forms of electrical appliances.

Moldova has also registered progress before the set deadline of 1 September 2017 namely referring to the:

- a) Directive 2012/27/EU (the successor of Directive 2004/8/EC) on energy efficiency was partially transposed by the Law on thermal energy and promotion of cogeneration¹³⁴

¹³¹ Law no. 44 from 27.03.2014 on labeling of products with an energy impact

¹³² Government Decision no. 1003 from 10.12.2014 on the approval of regulations of labeling of certain energy impact products

¹³³ Law no. 128 from 11.07.2014 on energy performance of buildings

¹³⁴ Law no. 92 from 29.05.2014 on thermal energy and promotion of cogeneration

- b) Directive 2009/125/EC on eco-design requirements for energy related products was transposed by the Law on ecological design requirements applicable to products with an energy impact¹³⁵

The eco-design requirements for energy related products Directive has 10 implementing Regulations and 1 implementing Directive, which are pending transposition by 1 September 2017.

Renewables

The National Renewable Energy Action Plan 2020 (NREAP) adopted by the Government in December 2013¹³⁶ is establishing the goal to ensure 20% of renewables in the energy mix of Moldova by 2020. This target is corresponding the global objective and is even more ambitious than the one agreed within the Energy Community, which is 17% of renewables in the energy mix. Thus, NERAP is aiming to reach the target by promoting new generation capacities of wind energy starting with 2016. The rest shall be added by biomass, solar and hydro energy. In this regards, it is important to underline that currently biomass heat generation occupy the biggest share in the renewables energy mix. Hydroelectric power plants constitute around 2% of the share.

Moldova committed to implement the EU Directive on the promotion of the use of energy from renewable energy sources¹³⁷ according to the commitment in the framework of the Energy Community by 1st of January 2014. The current 2007 Law on renewable energy is not transposing all the provisions of the Directive.

Thus, in order to ensure full transposition of the Directive 2009/28/EC, in 2013 the Government of Moldova has drafted a new law on the Promotion of Energy from Renewable Sources¹³⁸, approved by the Parliament in the first reading in July 2014 and is pending final adoption by the end of 2015¹³⁹. The draft Law is thus aiming to transpose the binding 17% target and the 10% target of renewable energy in transport as well most of the requirements of Directive 2009/28/EC, in particular introducing support schemes for energy from renewable sources based on tendering, which is a market-based mechanism in order to provide the development of renewable energy at lower cost for customers.

Currently, potential investors in renewable energy are facing administrative barriers, as the licensing procedures are common for all electricity producers and procedures for authorization, certification and licensing has to be separately regulated by ANRE for every stage of the project. Thus, the new law is transposing the principles that the licensing procedures should be objective, transparent and non-discriminatory. The draft law includes as well provision on guaranteed access to the grid and priority dispatch, the network operators will be required to offer all the necessary public information, including on the price, connection timing and network development in the relevant areas. However, it does not foresee the sustainability criteria, a clear certification scheme or relevant bodies for biofuels required by Articles 1-21 of the Directive.

¹³⁵ Law no. 151 from 17.07.2014 on ecological design requirements applicable to products with an energy impact

¹³⁶ NREAP <http://lex.justice.md/viewdoc.php?action=view&view=doc&id=351034&lang=1>

¹³⁷ Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable energy sources <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32009L0028>

¹³⁸ Draft law on the Promotion of Energy from Renewable Sources <http://www.particip.gov.md/proiectview.php?l=ro&idd=1171>

¹³⁹ The legislative plan for transposition of the provisions of the EU-Moldova Association Agreement <http://www.parlament.md/LinkClick.aspx?fileticket=JQPOYhNGO2A%3D&tabid=203&language=ro-RO>

CONCLUSIONS AND RECOMMENDATIONS

The Association Agreement provides the necessary framework to deepen the energy cooperation with the EU, adds value to the implementation of relevant commitments of Moldova as member of the Energy Community and thus if the respective EU energy *acquis* will be transposed will help Moldova to implement the objectives set in the 2030 Energy Strategy. At the same time, the Agreement is very clear in what concerns the primacy of the Moldova's obligations agreed as part of the Energy Community. The Agreement is reinforcing the ground for ensuring the security of supply, creation of a more competitive energy market and offers additional guaranties for transparent and more efficient organization of the energy sector in the Republic of Moldova. All-in-all Moldova committed to transpose 43 EU Directives and Regulations relevant to the energy sector, while 12 Directives and regulations were transposed before Moldova even started provisional application of the Association Agreement in September 2014.

Energy efficiency sector seems to be most advanced in terms of transposition of legislation, if compared with natural gas or electricity sector. While the adoption of primary legislation is registering a relative progress, though with delays in transposition in particular during the last year, the adoption of effective secondary legislation still remains as a challenge. Another challenge is the practical implementation by Moldova of the transposed EU *acquis* on natural gas and electricity, given alternative interconnection projects, as still about 96% of the energy is imported from Russia or Ukraine or is bought from power generation capacity in Transnistrian region that is also producing electricity mainly from imported natural gas.

Against this background, Moldova should speed up the construction of alternative natural gas and power interconnections with Romania in order to benefit from a more competitive energy market of the European Union. The Iasi-Ungheni pipeline creates solid grounds in this regard, but in order to use its full capacity the finalization of the second phase by 2018 is crucial. Speeding-up the construction of electricity high voltage lines (HVL) interconnections by 2019 for the asynchronous integration with ENSTO-E via Romania should be another short-term priority for Moldovan and Romania Governments as agreed in the MoU signed in May 2015. The support of the European Union and European IFIs as well as strengthening Moldova's participation in the Central and South Eastern European energy network is crucial in this regard.

Moldovan Parliament should also ensure rapid adoption of the new Laws on Natural Gas and Electricity aiming to transpose the 3rd Energy Package as advised by the Energy Community Secretariat as its implementation is already in retard. This recommendation is also valid in terms of the transposition process of the energy renewables provisions as the adoption by the Parliament of the draft law on the Promotion of Energy from Renewable Sources is pending for more than a year. A more transparent and independent activity of the National Agency for Energy Regulation is required, given the recent drawbacks related to the leadership of the Agency and lately shortcomings in the process of revision of the energy tariffs. A more predictable and transparent investment climate in the energy sector is required. Moldova needs as well to take all appropriate measures on the national level to benefit fully from the E5P pledges.

LIST OF CONSULTED SOURCES

Moldovan Legal Framework

1. The 1998 Energy Law
2. The 2007 Law on renewable energy
3. The 2009 Law on Natural Gas
4. The 2009 Electricity Law
5. The 2010 Law on Energy Efficiency
6. The 2012 Government Decision on the Energy Efficiency Fund
7. The 2013 Government Decision of the adoption of the Energy Efficiency Action Plan 2013-2015
8. The 2013 "Energy Security Strategy 2030" of the Republic of Moldova
9. The 2014 Law on labeling of products with an energy impact
10. The 2014 Law on energy performance of buildings
11. The 2014 Law on thermal energy and promotion of cogeneration
12. The 2014 Law on ecological design requirements applicable to products with an energy impact
13. The 2014 Government Decision on the approval of regulations of labeling of certain energy impact products
14. The 2015 Government Decision on the 2015 Energy Balance of Moldova
15. The 2015 Government Decision approving the new draft Natural Gas Law
16. The 2015 Government Decision approving the new draft Electricity Law
17. The Draft law on the Promotion of Energy from Renewable Sources
18. The Legislative plan for transposition of the provisions of the EU-Moldova Association Agreement, 9 July 2015, Parliament of the Republic of Moldova

European sources

19. The Annual implementation report published by the Energy Community Secretariat, 1 September 2015
20. The 2010 Energy Community Ministerial Council Decision on the Accession of Moldova to the Energy Community Treaty
21. EU-Moldova Association Agreement, signed on 27 June 2014
22. Protocol concerning the Accession of the Republic of Moldova to the Energy Community
23. The Energy Charter Treaty
24. Council Decision No 2006/1005/EC of 18 December 2006 concerning conclusion of the Agreement between the Government of the United States of America and the European Community on the coordination of energy-efficiency labelling programmes for office equipment
25. Commission Decision of 21 December 2006 establishing harmonised efficiency reference values for separate production of electricity and heat in application of Directive 2004/8/EC of the European Parliament and of the Council (2007/74/EC)
26. Commission Decision of 19 November 2008 establishing detailed guidelines for the implementation and application of Annex II to Directive 2004/8/EC of the European Parliament and of the Council (2008/952/EC)
27. Directive 92/42/EEC of 21 May 1992 on efficiency requirements for new hot-water boilers fired with liquid or gaseous fuels
28. Directive 94/22/EC of the European Parliament and of the Council of 30 May 1994 on the conditions for granting and using authorisations for the prospecting, exploration and production of hydrocarbons
29. Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market
30. Directive 2004/17/EC of the European Parliament and of the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors

31. Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment
32. Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable energy sources
33. Directive 2009/33/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of clean and energy-efficient road transport vehicles
34. Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity repealing Directive 2003/54/EC
35. Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas, repealing Directive 2003/55/EC
36. Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable energy sources
37. Directive 2009/119/EC of 14 September 2009 imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products
38. Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 on establishing a framework for the setting eco-design requirements for energy-related products
39. Directive 2010/30/EU of the European Parliament and of the Council of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products
40. Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings
41. Regulation (EC) No 1099/2008 on energy statistics
42. Regulation (EC) No 106/2008 of the European Parliament and of the Council of 15 January 2008 on a Community energy-efficiency labelling programme for office equipment
43. Regulation (EC) No 1222/2009 of the European Parliament and of the Council of 25 November 2009 on the labelling of tyres with respect to fuel efficiency and other essential parameters
44. Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity
45. Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions of access to the natural gas transmission networks
46. Regulation (EU, Euratom) No 617/2010 of 24 June 2010 concerning the notification to the Commission of investment projects in energy infrastructure within the European Union
47. Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply
48. The 2015 Memorandum of understanding on a Joint approach to address the natural gas diversification and security of supply challenges as part of the CESEC initiative
49. The 2015 Memorandum of understanding between the Government of Moldova and the Government of Romania on implementation of natural gas and electricity interconnections projects, signed on 21 May 2015 in Chişinău

Web sites:

50. <https://www.agora.md>
51. <https://www.anre.md>
52. <http://eur-lex.europa.eu/>
53. <http://www.energycharter.org/>
54. <https://www.energy-community.org>
55. <http://www.entsoe.eu/>
56. <http://www.entsog.eu/>
57. <https://www.esmap.org/>

58. <https://www.dsclcx.ro/>
59. <http://www.gov.md/>
60. <http://www.inogate.org/>
61. <http://lex.justice.md/>
62. <http://www.mec.gov.md/>
63. <https://monitorizare.gov.md/reports/Raport%20PNAAA.html>
64. <http://moldova.e5p.eu/>
65. <http://particip.gov.md/>
66. <http://www.parlament.md/>
67. <http://www.worldbank.org/>
68. <https://www.wto.org/>

ANNEX 1

Table on the status of implementation of the Energy EU *acquis*
EU-Moldova Association Agreement

	Area	Directive/Regulation/Commission Decision to be implemented by Moldova	Deadline	Status
	ANNEX VIII	TO CHAPTER 14 (ENERGY COOPERATION) OF TITLE IV		
1.	Electricity	Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity repealing Directive 2003/54/EC	Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty - 1 Jan 2015	Pending. The draft Law has been approved by the Government on October 7, 2015 Pending adoption by the Parliament by the end of 2015.
2.		Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access	Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty - 1 Jan 2015	Pending. The draft Law has been approved by the Government on October 7, 2015 Pending adoption by the Parliament by the end of 2015.
3.		Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment	Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty - 31 Dec 2010 (Not applicable?)	Transposed By the in force 2009 Electricity Law.

4.	Gas	Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas, repealing Directive 2003/55/EC	Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty - 1 Jan 2015	Pending. The draft Law on natural gas has been approved by the Government on October 28, 2015 Pending adoption by the Parliament by the end of 2015.
5.		Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions of access to the natural gas transmission networks	Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty - 1 Jan 2015	Pending. The draft Law on natural gas has been approved by the Government on October 28, 2015 Pending adoption by the Parliament by the end of 2015. ANRE aims to adopt the Regulation on conditions for access to the gas natural transmission networks in 2016.
6.		<i>Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010 concerning measures to safeguard security of gas supply</i> ¹⁴⁰	<i>Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty – 31 December 2015</i>	Pending. The new draft Law on natural gas is partially transposing the Regulation.
7.	Oil	Council Directive 2009/119/EC of 14 September 2009 imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products	Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty – 1 January 2023 ¹⁴¹	In the process. The 1st mission of the Energy Community Secretariat to the MoE regarding the transposition of the respective Directive took place in December 2014;

¹⁴⁰ Not agreed within the framework of Energy Community Treaty,

¹⁴¹ https://www.energy-community.org/portal/page/portal/ENC_HOME/ENERGY_COMMUNITY/Legal/EU_Legislation

				A first draft Law on emergency oil stocks was prepared by the Energy Community Secretariat and submitted to the MoE in the spring 2015
8.	Infrastructure	Council Regulation (EU, Euratom) No 617/2010 of 24 June 2010 concerning the notification to the Commission of investment projects in energy infrastructure within the European Union	Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017	Pending transposition in 2016
9.	Prospection and exploration of hydrocarbons	Directive 94/22/EC of the European Parliament and of the Council of 30 May 1994 on the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons	Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017	Pending
10.	Energy Efficiency	Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market	Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017	Partially transposed by the Law on the promotion of cogeneration and thermal energy dated May 29, 2014. <i>Note: Directive 2004/8/EC repealed through Directive 2012/27/EU of the European Parliament and of the Council on energy efficiency.</i>
11.		Commission Decision of 19 November 2008 establishing detailed guidelines for the implementation and application of Annex II to Directive 2004/8/EC of the European Parliament and of the Council (2008/952/EC)	Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017	Partially transposed by the Law on the promotion of cogeneration and thermal energy dated May 29, 2014.
12.		Commission Decision of 21 December 2006 establishing harmonized efficiency reference values for separate production of electricity and heat in application of Directive	Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017	Partially transposed by the Law on the promotion of cogeneration and thermal energy dated May 29, 2014.

		2004/8/EC of the European Parliament and of the Council (2007/74/EC)		
13.		Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings	Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty – 30 September 2012	Transposed The Law on energy performance of buildings was adopted by the Parliament in July 2014. The secondary legislation related to the Law on energy performance of buildings is to be adopted in 2016.
14.		Directive 2009/33/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of clean and energy-efficient road transport vehicles	Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017	Pending
15.		Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 on establishing a framework for the setting eco-design requirements for energy-related products	Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017	Transposed. The Law on eco-design has been adopted by the Parliament in July 2014. The secondary legislation related to the Law on eco-design (11 regulations) were developed and is pending approval in 2016.
		Implementing Directives/Regulations:		
16.		<i>Commission Regulation (EC) No 278/2009 of 6 April 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for no-load condition electric power consumption and average active efficiency of external power supplies</i>	<i>Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017</i>	Pending transposition in 2016
17.		<i>Commission Regulation (EU) No 347/2010 of 21 April 2010 amending Commission Regulation (EC) No 245/2009 as regards the ecodesign requirements for fluorescent lamps without integrated ballast, for high intensity discharge</i>	<i>Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017</i>	Pending transposition in 2016

		<i>lamps, and for ballasts and luminaires able to operate such lamps</i>		
18.		<i>Commission Regulation (EC) No 245/2009 of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps</i>	<i>Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017</i>	Pending transposition in 2016
19.		<i>Commission Regulation (EC) No 244/2009 of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for non-directional household lamps</i>	<i>Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017</i>	Pending transposition in 2016
20.		<i>Commission Regulation (EC) No 107/2009 of 4 February 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for simple set-top boxes</i>	<i>Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017</i>	Pending transposition in 2016
21.		<i>Commission Regulation (EC) No 1275/2008 of 17 December 2008 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment</i>	<i>Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017</i>	Pending transposition in 2016
22.		<i>Commission Regulation (EC) No 641/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for glandless standalone circulators and glandless circulators integrated in products</i>	<i>Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017</i>	Pending transposition in 2016

23.		<i>Commission Regulation (EC) No 640/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for electric motors</i>	<i>Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017</i>	Pending transposition in 2016
24.		<i>Commission Regulation (EC) No 643/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for household refrigerating appliances</i>	<i>Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017</i>	Pending transposition in 2016
25.		<i>Commission Regulation (EC) No 642/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for televisions</i>	<i>Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017</i>	Pending transposition in 2016
26.		<i>Council Directive 92/42/EEC of 21 May 1992 on efficiency requirements for new hot-water boilers fired with liquid or gaseous fuels</i>	<i>Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017</i>	Pending transposition in 2016
27.		Directive 2010/30/EU of the European Parliament and of the Council of 19 May 2010 on the indication by labeling and standard product information of the consumption of energy and other resources by energy-related products	Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty – 31 December 2011	Transposed The Law on energy labeling has been approved by the Parliament on March 27, 2014. The secondary legislation related to the Law on energy labeling (5 regulations) was approved by the Government in October 2014. Other secondary legislation (4 regulations) related to the Law on energy labeling is pending adoption in 2016.
		Implementing Directives/Regulations:		
28.		<i>Commission Directive 2003/66/EC of 3 July 2003 amending Directive 94/2/EC implementing Council</i>	<i>Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty 31 December</i>	Pending

		<i>Directive 92/75/EEC with regard to energy labelling of household electric refrigerators, freezers and their combinations</i>	2011	
29.		Commission Directive 2002/40/EC of 8 May 2002 implementing Council Directive 92/75/EEC with regard to energy labelling of household electric ovens	<i>Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty -</i> 31 December 2011	Transposed. By the Governmental Decision No. 1003 from 10.12.2014 approving the regulations on energy labeling of energy-related products
30.		Commission Directive 2002/31/EC of 22 March 2002 implementing Council Directive 92/75/EEC with regard to energy labelling of household air-conditioners	<i>Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty -</i> 30 September 2012	Transposed. By the Governmental Decision No. 1003 from 10.12.2014 approving the regulations on energy labeling of energy-related products
31.		<i>Commission Directive 1999/9/EC of 26 February 1999 amending Directive 97/17/EC implementing Council Directive 92/75/EEC with regard to energy labelling of household dishwashers</i>	<i>Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty</i>	<i>Note: Directive 1999/9/EC was repealed.</i>
32.		Commission Directive 98/11/EC of 27 January 1998 implementing Council Directive 92/75/EEC with regard to energy labelling of household lamps	<i>Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty -</i> 30 Sep 2012	Transposed. By the Governmental Decision No. 1003 from 10.12.2014 approving the regulations on energy labeling of energy-related products
33.		<i>Commission Directive 97/17/EC of 16 April 1997 implementing Council Directive 92/75/EEC with regard to energy labelling of household dishwashers</i>	<i>Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty</i> 31 December 2011	<i>Note: Directive 97/17/EC is repealed by Regulation (EU) 1059/2010 of 28 September 2010 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of household dishwashers</i>
34.		Commission Directive 96/89/EC of 17 December 1996 amending Directive 95/12/EC implementing Council Directive 92/75/EEC with regard to energy labelling of household washing machines.	<i>Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty -</i> 31 December 2011	Transposed. By the Governmental Decision No. 1003 from 10.12.2014 approving the regulations on energy labeling of energy-related products
35.		<i>Commission Directive 96/60/EC of 19 September 1996 implementing Council Directive 92/75/EEC with regard to energy labelling of household</i>	<i>Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty -</i> 31 December 2011	Pending

		<i>combined washer-driers.</i>		
36.		Commission Directive 95/13/EC of 23 May 1995 implementing Council Directive 92/75/EEC with regard to energy labelling of household electric tumble driers.	<i>Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty -</i> 31 December 2011	Transposed. By the Governmental Decision No. 1003 from 10.12.2014 approving the regulations on energy labeling of energy-related products
37.		Commission Directive 95/12/EC of 23 May 1995 implementing Council Directive 92/75/EEC with regard to energy labelling of household washing machines.	<i>Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty -</i> 31 December 2011	Transposed. By the Governmental Decision No. 1003 from 10.12.2014 approving the regulations on energy labeling of energy-related products
38.		<i>Commission Directive 94/2/EC of 21 January 1994 implementing Council Directive 92/75/EEC with regard to energy labelling of household electric refrigerators, freezers and their combinations</i>	<i>Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty -</i> 31 December 2011	Pending
39.		Council Directive 92/75/EEC of 22 September 1992 on the indication by labelling and standard product information of the consumption of energy and other resources by household appliances	<i>Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty -</i> 31 December 2011	Transposed. By the Governmental Decision No. 1003 from 10.12.2014 approving the regulations on energy labeling of energy-related products
40.		Regulation (EC) No 106/2008 of the European Parliament and of the Council of 15 January 2008 on a Community energy-efficiency labelling programme for office equipment	Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017	Pending
41.		Council Decision No 2006/1005/EC of 18 December 2006 concerning conclusion of the Agreement between the Government of the United States of America and the European Community on the coordination of energy-efficiency labelling programmes for office equipment	Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017	Pending

42.		Regulation (EC) No 1222/2009 of the European Parliament and of the Council of 25 November 2009 on the labeling of tyres with respect to fuel efficiency and other essential parameters	Shall be implemented within 3 years of the entry in to force of this Agreement – 1 September 2017	Pending
43.	Renewable energy	Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable energy sources	Shall be implemented according to the timeline agreed within the framework of the Energy Community Treaty – 1 January 2014	<p>Partially transposed by The National Renewable Energy Action Plan until 2020 was approved by the Government Decision No. 1073 as of December 27, 2013.</p> <p>And the draft Law on the promotion of use of energy from renewable sources approved by the Parliament in the 1st reading on July 17, 2014 and is pending final adoption by the end of 2015.</p> <p>Secondary legislation related to the RES Law pending adoption in 2016.</p>