Romania

Key Issues
Correct and complete transposition of the Third Energy Package and its practical application needs to continue. Romania should complete the corporate governance reform of state-owned enterprises in the energy sector in line with the internal energy market legislation.

Romania’s roadmap for phasing out regulated gas and electricity prices and improving retail competition and energy efficiency needs to be fully implemented. The process of electricity market coupling should be finalised following the target model.

The completion of gas interconnections and reverse flow projects, including physically linking the Romanian gas system with the transit pipelines, are necessary to strengthen security of supply and to enable increased exploitation of domestic gas resources.

Further electricity interconnection is needed to exploit the high generation capacity.

Romania is on track to meet its 2020 renewable target but upgrades to the network would help integrate more renewables.

General overview
In 2009, the economic downturn led to a decrease in consumption which has recovered slightly since 2011. In 2012, the overall renewables contribution was 22.9%, close to the 24% national target for 2020.

Figure 1: Gross inland consumption mix 2008 – 2012 (source: Eurostat)
In 2012, domestic natural gas consumption amounted to 109 TWh (75.68% of total consumption) while imports were 35 TWh\(^{434}\). In 2013, the 8.4% decrease in consumption led to a 58% reduction in import while domestic production remained at 2012 levels.

In 2013, the breakdown of electricity generation was 46.2% thermal, 25.9% hydro and 19.9% nuclear\(^{435}\). Renewable energy sources amounted to 4.348 MW installed capacity. The renewables share in gross final energy consumption reached 22.9%\(^{436}\) in 2012 and thus Romania is almost at its national 2020 target of 24%.

Figure 2: Gross electricity generation mix 2008 – 2011 (source: EU Energy in Figures – Pocketbook 2012 and 2013)

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**Regulatory framework**

**General**

In September 2014 Romania adopted amendments to its energy legislation intended to ensure full transposition of the Third Energy Package Electricity and Gas Directives\(^{437}\). An infringement procedure on restrictions on the export of gas, initiated in 2012 under the TFEU and the Gas Directive, is on-going\(^{438}\).

**National Energy Regulator**

The National Energy Regulator, ANRE, was established in 1998. By law, ANRE may employ a maximum of 300 persons. Its total budget in 2013 was EUR 15.8 million.

\(^{436}\) Eurostat
\(^{437}\) The Commission is examining whether the national legislation now fully transposes the Directives and will decide on the respective infringement procedures for partial transposition accordingly (Cases C-405/13 and C-406/13, IP/13/260).
Unbundling

Electricity sector unbundling has been ongoing since 2000\textsuperscript{439} when CNTEE Transelectrica SA was appointed as the electricity TSO. SNTGN Transgaz SA Medias was appointed as the gas TSO. Both companies are state-owned and were certified as independent system operators by ANRE in 2013\textsuperscript{440}, subject to fulfilling certain additional requirements to be complied with\textsuperscript{441}. It has meanwhile been able in 2014 to issue final certification decisions after it deemed that these additional requirements were satisfied. Legal unbundling of electricity and gas distribution operators has been ongoing since 2007.

Wholesale markets

Electricity

Energy Complex Oltenia, Hidroelectrica and Nuclearelectrica are the three largest generators with a total market share of 70.01\%\textsuperscript{442} (69.7\% in 2013). The HHI in the wholesale market is 1,914 (1,759 in 2013). 2012 was a dry year, leading to very high prices in the wholesale electricity market, and a spot base load price of EUR 48.8/MWh. The spot base load price in 2013 decreased to EUR 35.3/MWh, due to lower demand, normal hydrology and a large amount of wind generation. Due to significant changes in primary legislation, transactions performed on the centralised competitive wholesale markets organised by Opcom SA (the operator of wholesale market) significantly increased. The volume sold on Opcom SA platforms is almost double than that of 2012, and represents 71\% of internal consumption.

The TSO develops and administrates balancing, ancillary services and cross-border capacity markets. Bilaterally coordinated auctions for long and short term were organised as of 2012 for cross-border capacity allocation on the borders with Hungary and Bulgaria and, since December 2012, on the border with Serbia.

In July 2013, the Czech Republic, Slovakia, Hungary, Romania and Poland signed a Memorandum of Understanding to extend the existing market coupling in Central Eastern Europe by including Romania and Poland.

Gas

In 2012, demand was met by imports and six domestic producers. The two leading gas producing companies, Romgaz and OMV Petrom, provided 97.5\% of domestic production. The market is highly concentrated and the sum of market shares of the three main suppliers in the wholesale market (Romgaz, OMV Petrom and OMV Petrom gas) is 78.4\%.

In 2012, trading was through long term bilateral contracts and capacity allocation on a "first-come first-served" basis. In July 2013, OPCOM\textsuperscript{443} and the Romanian Commodity Exchange BRM\textsuperscript{444} were

\textsuperscript{439} Government Decision no. 627/13.07.2000 regarding the restructuring of the National Electricity Company.
\textsuperscript{440} ANRE Order no.90/11.12.2013 and ANRE Order no.3/22.01.2014, respectively.
\textsuperscript{441} Decisions EC 6891 /14.10.2013 and 8485/25.11.2013, respectively.
\textsuperscript{442} CEER data for 2012
\textsuperscript{443} Licence no.1798 / ANRE Decision 2120/2013.
\textsuperscript{444} License no.1797 / ANRE Decision 2119/2013.
licensed by ANRE to organise gas centralised trading. The gas market development should be fostered by completion of the interconnection and reverse flow projects with neighbouring countries.

**Retail markets**

**Electricity**

The gradual phasing-out of regulated prices was completed in December 2013 for non-household consumers, whilst for households it should be completed by December 2017. The number of consumers supplied on a competitive basis (which have chosen to change suppliers) has constantly increased; in December 2013 it was close to 19,200. The switching rate in the retail electricity market is still very low (0.03% in 2012). 62 suppliers operate in the retail market while the degree of real market opening has only slightly increased from 55% in 2012 to 57% in 2013. Due to the negative or slim margins allowed by price regulation, suppliers are discouraged from making offers outside their supply areas, therefore consumer choice is in reality often very limited.

*Figure 3: Electricity price change by component 2008 – 2013 (source: Eurostat, energy statistics)*

To ensure universal service, five appointed suppliers of last resort are required to procure a progressively increasing share from the wholesale competitive market, with the costs transferred to end-consumers.

**Gas**

In 2012, gas consumption was 145 TWh of which household consumption was 20%. During the period 2010–2012, household prices including taxes and levies have remained constant, while the price for industrial users has continued to increase. However, the on-going phasing out of regulated prices will have an impact on prices for both categories.
Phasing out of regulated prices for non-households will be completed in December 2014 (or end 2015 if there is a significant difference between the domestic gas price and European import price that could endanger market stability). For households, the process lasts until December 2018.

Consumers
Consumers’ overall assessment of the retail electricity and gas markets is just above the EU average (72.7 points compared to 72.0 and 74.4 compared to 74.1), corresponding to 16th and 15th place EU-wide, respectively. The gas market has seen a considerable improvement (of 3.4. points) between 2012 and 2013 (second highest increase domestically). However, both markets score low on actual switching, ease of switching, choice and overall consumer satisfaction (for gas market the latter three rank among the three lowest in the EU). In addition, the incidence of consumer problems is relatively high (3rd highest in the gas market).\(^{445}\)

Vulnerable customers are defined as household consumers with low income within the limits laid down in the Ordinance 27/2013. The road maps for phasing out regulated electricity and gas prices includes social measures for vulnerable consumers by providing direct subsidies, informing consumers about the process of market liberalisation, reviewing the process for changing suppliers and detailing electricity and gas bills. Financial aid for social protection during the cold season is in place.

Developing a price comparison tool has been debated, but the decision is pending. Independent dispute settlement commissions will be established within ANRE for both gas and electricity.

A study\textsuperscript{446} has concluded that implementing smart metering is feasible for electricity consumers, while for gas consumers’ installation will be optional and the decision will be left to the DSOs. The promotion of pilot projects on smart metering of electricity distribution systems is one of the measures included in "Main Commitments for the National Reform Programme 2013"\textsuperscript{447}.

**Infrastructure**

The Department of Energy within the Ministry of Economy has been designated as National Competent Authority responsible for facilitating and coordinating the permit granting process for projects of common interest in accordance with the provisions of the TEN-E Regulation ("one-stop shop").

**Electricity**

Transelectrica is involved in several infrastructure projects with neighbouring power systems to improve the cross-border exchange of electricity, relief congestion and improve the integration of RES. The projects are focused on enhancing interconnector capacity with Serbia, Bulgaria and Republic of Moldova\textsuperscript{448}. Six out of seven Projects of Common Interest (PCI) which have been identified under the guidelines for trans-European energy infrastructure on Romanian territory focus on the upgrade of the internal electricity system with new 400 kV overhead lines. Romania meets the 10% interconnectivity target set by the Barcelona Council in 2002.

**Gas**

Transgaz has planned the redefinition of domestic gas transmission routes in line with envisaged national and European flows, including off-shore gas reserves, the shale gas perspective and the Southern Corridor. The plan includes new high pressure pipelines and rehabilitation of existing assets.

The interconnection with Bulgaria will ensure minimum gas flow for emergency supply, with bi-directional flows expected by the end of 2016. Further development of the interconnector with Hungary, commissioned in 2010, will lead to full capacity of 4.4 bcm/year in 2016. The project provides a transmission corridor from the Black Sea and Bulgaria to the markets in Central and Eastern Europe. The development of interconnection with Moldova and Serbia will only achieve its full potential if additional investments are made on both sides of the interconnectors.

The above mentioned issues are covered through the seven gas Projects of Common Interest with Romanian participation. The construction of a LNG terminal in Constanta could help to diversify the country’s supply portfolio.

**Security of Supply**

**Electricity**

A peculiarity of the Romanian electricity system is its current overcapacity in combination with limited export capacity. The existing capacity is largely meeting demand, but maintaining this capacity will require improvements in export conditions.

\textsuperscript{446} A.T. Kearney, "Smart metering in Romania", 3 September 2012.

\textsuperscript{447} Romania, Ministry of Foreign Affairs, "Main commitments for the National Reform Programme 2013".

\textsuperscript{448} ANRE, National Report 2012, 2013.
Gas

In the gas sector security of supply is jointly ensured by the TSO, the 41 DSOs and the two operators of underground storage. Special care is given to ensuring conditions for continuity and safety of gas supply by ensuring a minimum stock of gas in underground storage. The obligations of licensed suppliers to maintain the minimum level are set by ANRE.

**Key indicators**

<table>
<thead>
<tr>
<th></th>
<th>Electricity</th>
<th>Gas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of companies representing at least 95% of net power generation</td>
<td>11</td>
<td>Number of entities bringing natural gas into country</td>
</tr>
<tr>
<td>Number of main power-generation companies</td>
<td>5</td>
<td>Number of main gas entities</td>
</tr>
<tr>
<td>Market share of the largest power-generation company</td>
<td>26.7%</td>
<td>Market share of the largest production and import gas company</td>
</tr>
<tr>
<td>Number of electricity retailers</td>
<td>54</td>
<td>Number of retailers selling natural gas to final customers</td>
</tr>
<tr>
<td>Number of main electricity retailers</td>
<td>5</td>
<td>Number of main natural gas retailers</td>
</tr>
<tr>
<td>Switching rates (entire electricity retail market)</td>
<td>0.033</td>
<td>Switching rates for gas (entire retail market)</td>
</tr>
<tr>
<td>Regulated prices for households – electricity</td>
<td>Yes</td>
<td>Regulated prices for households – gas</td>
</tr>
<tr>
<td>Regulated prices for non-households – electricity</td>
<td>No(^{449})</td>
<td>Regulated prices for non-households – gas</td>
</tr>
<tr>
<td>HHI in power-generation market</td>
<td>1,914</td>
<td>HHI in gas supply market</td>
</tr>
<tr>
<td>HHI in electricity retail market</td>
<td>1,472</td>
<td>HHI in gas retail market</td>
</tr>
<tr>
<td>Electricity market value(^{450}) (bn€)</td>
<td>3.471</td>
<td>Gas market value(^{450}) (bn€)</td>
</tr>
<tr>
<td>Installed generation capacity (MW)</td>
<td>18,756</td>
<td></td>
</tr>
<tr>
<td>Peak load (MW)</td>
<td>8,627</td>
<td></td>
</tr>
<tr>
<td>Number of smart meters installed</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

\(^{449}\) These regulated prices were totally removed since 1 January 2014.

\(^{450}\) Market value is an estimation of the size of the retail electricity and gas markets. It is calculated using data on electricity and gas consumption in the household and non-household sectors (average bands) and annual average retail prices.