CANDOLE PARTNERS

COMPARATIVE UPDATE ON ENERGY SECTORS IN CENTRAL & SOUTHEAST EUROPE

DISTRICT HEATING, CO-GENERATION & WASTE-TO-ENERGY

OCTOBER 2010

Public policy

Governments across the region are late with the adoption of their national energy strategies. It is hard to see the strategies being in place before 2011. In the Czech Republic, the strategy has been delayed by an industry ministry analysis of the economic and social impact of maintaining coal mining limits. The analysis is due out by end February 2011. The strategy will likely establish self-sufficiency in electricity generation as the main principle. Meanwhile, the amendment to the Czech Energy Act has been sent to the legislative council, which should pass it on to the cabinet in November 2010. The Slovak government is no more advanced in adopting a new energy policy. The economy ministry has set the new deadline for mid-2011.

October has seen substantial movement in the regulation of renewables, with mounting evidence that the sector has become less appealing to policy makers. The Czech industry ministry had proposed an amendment to the currently valid RES Support Act which limits the installed PV and wind capacity to prevent a steep increase in electricity prices. The amendment was adopted by the lower house at end October and we expect it to be approved in the Senate without change. The government decided that the price increase should be limited to 5.5% for both households and industrial consumers. Additional compensation for electricity distributors should be funded from the state budget. A Bill in parliament places a cap on new RES capacities eligible for support for the years 2012-2020. According to the proposed law, only small RES up to 100 kW installations will be eligible to receive a stable feed-in tariff payment over the life-cycle of the installation. The feed-in tariff amount will be calculated using a 15-year simple investment payback guarantee.

In Slovakia, a junior governing coalition party submitted an amendment to the Act on RES Support. The proposal makes the RES support mechanism less appealing for investors. It imposes responsibility for grid imbalances on RES producers over 1 MW (PV plants over 100 kW). The full feed-in tariff will only be paid to PV installations under 100 kW placed on roofs or buildings. The regulator will be allowed to adjust the feed-in tariffs if the investment return period is lower than 12 years. And RES producers benefiting from the full feed-in tariff will not be eligible for any financial support to cover projects costs. The government's support for the development of the sector is jeopardised by the amendment and may reduce the impact of the Slovak RES action plan approved by the government in early October 2010.

Bulgaria follows a similar path. Its energy ministry has published an updated draft of the RES Act. The most controversial amendment (cap on installed capacity of 600MW for solar and 1800MW for wind) has been eliminated from the draft although it might reappear in the final version. Other harmful amendments remain, such as the possibility of EDCs to cut off RES projects at any time in the case of grid overload.

The Hungarian government is also late in adopting the country's RES action plan, despite reassurances offered to industry that the plan would be complete by end November. The draft plan foresees HUF 1.3bn/€4.8bn investments into the renewable sector, out of which 80% is expected to be financed by the private sector and the European Investment Bank. Few investments will be made by the government alone. Industry has criticized the government for its poor management of the process and for the lack of detail.

The Czech governing coalition intends to amend the Clean Air Act, which would harm the energy sector. The amendments allow the government to set by decree emission ceilings for all stationary sources or their groups in a given area, and enable regional governments to set stricter emission ceilings than those set by at the national level. The amendments will increase red tape in environment compliance permitting.

There has been little change this month on investment opportunities in the electricity and district heating sectors. In Slovakia, the government has not yet decided on the privatisation methods of the previously selected six state-owned district heating companies. There are two likely options on the table. The first is to transfer the companies' shares to municipalities, who would then start joint-ventures with private investors. The second option is to sell 49% of shares in DHCs and give management control to private investors. However, other options, such as privatisation of 100% of shares, have not been ruled out.

In Ukraine, the chairman of SPF announced that the agency is now preparing the privatisation of thermal power plants Centrenergo, Donbassenergo, Zakhidenergo and Dniproenergo. According to the privatisation fund, these plants are to be sold only after completion of privatization of Ukrtelecom, the telecom incumbent. Before privatisation starts, the president needs to abolish a decree issued by his predecessor which prohibits the transfer of shares of the four TPPs from the Energy Company of Ukraine to SPF.

Meanwhile, the Ukrainian parliament approved the Single Investment Window Act the purpose of which is to minimize red tape for foreign investors. The new mechanism should be in place by January 2012.

In Romania, the creation of two vertically integrated energy firms has not moved forward this month. Nonetheless, assumptions on how the two firms would operate have become more transparent. As predicted, the intention is to use the profitable generators, Hidroelectria and Nuclearelectrica, as cash cows for the financially distressed gas- and coal-fired electricity producers. Hidroelectrica's director for operations stated that Hidroenergetica would modernize the production capacities of Electrocentrale Deva and Electrocentrale Bucuresti power plants, decreasing net installed capacities from some 2,000MW to 1,100MW. The official emphasised the importance of the mining sector and thermal power plants, to be included in the two companies, for the security of electricity supply. He argued that the coal-fired sector is too important to be abandoned and that Hidroelectrica and Nuclearelectrica have "moral obligations" to help coal-fired generators to survive.

The Romanian government will continue to subsidize district heating producers in the winter of 2010-2011. The government announced it would distribute about 1.6bn tons of coal and over 178,000 tons of fuel oil from the state reserves to DH operators this winter. CHPs, heat producers and energy compounds will be allowed to borrow coal and fuel oil from the state reserves due to insufficient stocks for this winter. The quantities have to be returned by end May, 2011. The interior minister will transfer RON 165mn as subsidies to indebted CPHs. The funds will be used to repay debts toward the lignite national company (total RON 148.3mn) and national railway freight company (total RON 16.9mn).

Politics

The politics of the region have been dominated by elections. In the Czech Republic, the governing coalition lost its majority in the Senate. The Social Democrats won 12 districts, giving them a majority in the upper house (41 out of 81 seats). This shift in power in favour of the Social Democrats will play havoc with the government's reform plans. It will not affect energy policy.

Table 1: Senate composition, mandates, Czech Republic	
ČSSD	41
ODS	25
KDU-ČSL	6
KSČM	2
TOP 09	5
Severočeši.cz	2

In Hungary, Fidesz won a landslide in local elections, consolidating its control of the country at national and local levels. The party holds all 19 county councils and 22 out of 23 big cities. The exception is Szeged (Southern Hungary) won by the Socialists. Fidesz suffered minor defeats in three towns (Esztergom, Csorna and Sarkad) at the hands of independents. The right-wing Jobbik was trashed, winning just one small town. The new Green Party (LMP) did worse than in April's general election, and is confined to Budapest, replacing the Liberals who lost all their seats in April.

Slovakia is getting ready for municipal elections end November 2010. Mayors will be elected by the first-past-the-post formula. Turnout will be low and we expect SMER and independent candidates to improve their position throughout the country. We predict that SMER will win the mayoralty in Bratislava.

In Ukraine, the constitutional court abolished the Orange Revolution's constitutional reforms, which weakened the president in favour of parliament. The court ruled that the 2004 reform was illegitimate, and returned Ukraine to the status quo ante.

The Hungarian government has clarified at last the divisions of powers in the energy sector. The economy ministry will be responsible for financial and competition policies. Henceforth, the ministry of development alone will be responsible for energy policy, which might improve the policy making process.

Regulation

Important regulatory news comes from Romania this month. The energy regulator published two draft regulations on implementation of the CHP support mechanism. These are the methodology on payment of the CHP bonus to CHP generators and the methodology on payment of CHP contributions by electricity traders. The energy regulator has to publish two additional regulations to fulfil its obligation regarding the implementation of the support mechanism for high efficiency co-generation. The first regulation is the overcompensation methodology and the second, the methodology on the monitoring of the implementation of the support scheme.

ANRE estimates that the two regulations will be put in place by 1Q 2011. Nonetheless, the regulator intends to start the support mechanism by 1 January 2011, claiming that the two regulations are not essential at this time. The broad principles of the overcompensation methodology will be published by December 2010.

However, the support mechanism for cogeneration drafted by ANRE is threatened by a CHP Bill in parliament which allows inefficient co-generation to benefit from the support mechanism for co-generation. The Bill has been criticised by the government, which argues that it increases the costs for consumers without stimulating new investments in the co-generation sector. The Bill has received favourable opinions from the judicial and economic committees in the upper house and we expect it to win the majority support of MPs.

In Slovakia, state officials in the dominant gas utility SPP have vetoed the proposal of the management to increase gas prices for households by 13.4%. According to the current legislation, any price proposal coming from SPP as the dominant gas utility has to be approved by both management and supervisory boards. Even so, utility prices are likely to increase next year. The Slovak Association of Heat Producers expects heating prices to grow by an average 6-8% in 2011. The increase will be caused by planned growth in gas prices, increase in VAT and excise duties and decrease in contracted heat by 4-5%. According to the association, the price of heat produced in CHPs using biomass should not increase thanks to stable prices of biomass and long-term contracts for the supply of biomass. Electricity prices in 2011 will be affected by the increased VAT, expansion of RES installations and increased fees paid to the National Nuclear Fund (NNF). However, Slovenske Elektrarne as the dominant electricity producer has agreed with the economy ministry to reduce wholesale electricity prices by EUR 2.9 MWh to offset the fee to NNF.

In Ukraine, Ukrenergo has proposed a change in the auction procedure for electricity exports to NERC. Ukrenergo proposes to change the current principle of initial price forming to one of setting initial prices for lots at a rate of 10% of the security deposit paid by a company intending to participate. The deposit varies for different lots and is set by NERC in advance. The money is returned after the auction. NERC approved a new methodology in August, according to which the initial price of a lot is based on proposals from bidders. September and October auctions were held according to the new methodology. As only DTEK (apart from Bila Tserkva CHP in October) participated in the auctions, the initial price of each lot was very low. The methodology was criticized for serving the interests of DTEK and harming the state budget.

Market

Regional electricity prices increased in October compared to September. The average prices on the day-ahead markets increased by about 7%-15%. Opcom was been the market with the highest price increase this month. The baseload price soared by 12% on September, to €42.02/MWh. The peakload price increased by 15% on September, to €45.32/MWh. The prices of other power exchange markets in the region increased at a slower pace, by 7%-10%. Romania continues to score the lowest electricity prices, while OTE and HUPX trade close to EEX prices (see Table2).

Table 2: Average day-ahead daily wholesale prices, €/MWh, October 2010

Power exchange	Baseload price	Peakload price
EEX	50.30	56.43
OTE	49.40	56.13
HUPX	50.44	57.55
Opcom	42.02	45.32

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ENERGY SECTOR IN THE CZECH REPUBLIC

DISTRICT HEATING, CO-GENERATION & WASTE-TO-ENERGY

OCTOBER 2010

1. EXECUTIVE SUMMARY

- Energy strategy update delayed until an impact analysis of maintaining coal mining limits completed. In Spring 2011, the government will receive two energy policy scenarios - with and without the limits - to decide on.
- The lower house will probably approve on 9 November 2010 new measures to limit the increase of electricity prices for next year. The proposal introduces state budget subsidy for RES development. Funding for the subsidy is to be raised by a combination of duty on solar electricity; gift tax on CO2 allowances for power generation; and increased fees for land zoning changes.
- Amendment to the Clean Air Act has been agreed within the lower house.
- RES Bill and Energy Act amendment remain in the legislative council of the government.
- CSSD won a majority in the upper chamber of the parliament, which will significantly weaken the government's reform ambitions.
- The economic committee of the lower house has debated a proposal which would accelerate permit proceedings for the construction of energy infrastructure.
- Tender for Temelin delayed by at least several months. This plus changes in the CO2 allowances regime, has caused CEZ stock to dip.
- E.ON won approval from the Commission for the takeover of Prague gas supplier, Prazska plynarenska.

2. PUBLIC POLICY UPDATES

2.1. Energy strategy

Title **Energy strategy update**

Description The industry ministry is conducting an analysis of the economic and social impact of maintaining coal mining limits. The analysis should be completed by end February 2011. This will delay submission of an updated energy policy to the government until Spring 2011.

The policy will maintain self-sufficiency in electricity generation as one of its principles. Based on this principle, the ministry will work out two scenarios- with and without limits. The government will decide on which scenario to adopt.

Municipal elections in Horni Jiretin were won by a local coalition of independent and Green candidates for a four year term. The village sits on coal beyond the limits.

Probability Medium.

Impact Industry ministry is dragging its feet to delay approval of a new energy strategy that would maintain the coal mining limits. Maintaining coal mining limits is part of the ruling coalition agreement although neither ODS or TOP 09 actually support the limits.

The election result in Horni Jiretin will complicate negotiations between the local council and Czech Coal on compensation for demolishing the village. ODS and TOP 09 have both said that an agreement on compensation is a precondition of breaking the limits. Legal preconditions include the abolition of a government resolution on coal mining limits (444/21991) and changing the regional land zoning plans.

2.2. Public policy in the energy and environment sectors

Title **Amendment to the RES Support Act #1**

Description The industry ministry proposed an amendment to the RES Support Act to limit an increase of installed PV and wind capacity and so prevent a sharp spike in electricity prices. The proposal limits RES support to PV installations of up to 30kW on roofs and buildings only and would require all supported installations be connected to the grid.

The proposed entry into force of the amendment is January 2011, with a 12-month transition for connecting already operating installations to the grid. Support for these installations would be calculated as of date of connection.

Probability High. The amendment was adopted by the lower house on 29 October 2010 and is expected to pass in the Senate without further changes.

Impact Medium. The original proposed date of entry into force was November/December this year. This corresponded with the original intention of the ministry to block the connection of additional PV capacity by the end of this year and thus prevent a spike in 2011 prices. Fear of legal action led to the delay, which will leave unharmed investors seeking to exploit the high feed-in tariffs by launching their PV projects by December. The regulator already has an instrument to decrease tariffs for next year.

Title **Amendment to the RES Support Act #2**

Description The regulator estimated that, with no change in financing system of RES, electricity prices would increase by 12% for households and 17% for industrial consumers as a result of failure to regulate solar feed-in tariffs. It estimated installed solar capacity by the end of this year at 1,400-1,600 MW (compared to 754 MW installed at end September).

The government decided that price increase should be limited to 5.5% for both households and industrial consumers. Additional compensation for distributors is to come from the state budget with revenue to be raised from the following measures:

1. A 26% duty on feed-in tariff and 28% on the green bonus for solar electricity. This would concern only installations put into operation in 2009 and 2010 and the electricity these produce between 2011 and end 2013;
2. Increased fees for the transfer of land from agricultural to construction zone status as follows:

Land protection class	I.	II.	III.	IV.	V.
Multiple of basic fee	9x	6x	4x	2x	2x

3. A 32% gift tax on CO_2 allowances allocated free of charge for power generation in 2011 and 2012. Electricity from co-generation and in industrial power plants should be exempted from the tax.

Probability High. The above measures were approved by the government on 13 October 2010. In order to pass them quickly in the lower house, coalition MPs were asked to present the measures in the economic committee, which approved them as a modification to the RES Support Act. The measures received an approval of the lower house on 9 November 2010.

Impact High. The increase of zoning fees is a non-controversial measure that has been called for by the environment ministry for years on purely environmental grounds. The other two measures are dubious: there are legal analyses on the retroactivity of the tax on solar electricity and the gift tax may well be in violation of the EU directive on emission allowances trading. Although both will have a significant financial impact on CEZ, the company is unlikely to challenge them as this would enrage the finance minister. Other large members of the heating association, such as Dalkia and EPH, may be opposed but they cannot succeed without CEZ's backing in overturning the decision on a gift tax.

As part of the discussion on the means of funding RES support, industry representatives and finance minister Kalousek backed using revenue from the auctioning of all CO_2 allowances for power generators from 2013 on. According to the current CO_2 emissions trading law, allowances for power generators for 2013-2020 trading period can be auctioned gradually (30% in 2013 increasing to 100% in 2020). There is strong opposition to changing this law within both ODS and ČSSD.

Title Amendment to the Clean Air Act

Description Coalition MPs proposed an amendment to the Clean Air Act, which would

- mandate the government to set emission ceilings for all stationary sources or their groups in a given area by decree;
- enable the regional government to set stricter emission ceilings than those set by government decree;
- enable regional governments to set additional conditions in the permit for other related operations;
- and enable the regional government to change the pollution permit when the emission limits or ceilings change (above decree is adopted).

The proposal was submitted to the lower house on 13 September 2010.

Probability High. The proposal was debated by the environment committee of the lower house on 5 November 2010, which modified it. The committee's modified version of the proposal has cross-party support in the lower house.

Impact Low. The amendment differs little in the above provisions from a brand new Clean Air Bill, which is now close to completion by the ministry of environment. It merely speeds up the process of adopting the new provisions, which are mostly directed against polluters in one specific region in the Czech Republic (Moravia Silesia - site of the ArcelorMittal steel plant). The amendment can be seen as an attempt by the environment minister to show a strong clean air commitment ahead of communal elections on 15-16 October 2010. This is confirmed by the compromise version of the proposal adopted by the environment committee, which dilutes the provisions on emission ceilings for stationary sources (the government will set the ceilings by a decree and regional clean air authority will take measures to cut emissions below the ceilings).

Title Energy Act

Description The main principles of the amendment are:

- More power to the regulator: The regulator (ERU) will gain powers in regards to competition in the energy market (electricity and gas). The extension of competences of ERU does not infringe upon the competences of the competition authority. ERU will intervene on the market in cases when the market becomes non-competitive despite the fact that none of the players breaches competition rules.[1] However, the precise delimitation of powers between ERU and the competition authority is not clear and neither is the nature of measures that ERU may undertake to restore competition on the market.

[1] Interview with Antonin Panak, head of legislative department, ERU, 20 August 2010.

ERU will also replace the State Energy Inspectorate (SEI) in supervising compliance with the Energy Act in the gas and electricity sectors. SEI's competences will be limited to overseeing compliance with the Act on Energy Efficiency and some provisions of the RES Support Act.

- More independent regulator: The Amendment changes the process of appointment of the chairman of ERU, who should be nominated by the Senate and appointed by the president. The financing is also proposed to be changed to achieve greater independence of the regulator from the government. The budgetary chapter will be proposed by ERU and if not accepted by the finance ministry, the budget committee of the lower house will have the right to decide.
- Implementation of unbundling in gas sector: As the amendment transposes the 3rd liberalization package, it describes in detail the process of Independent Transmission Operator certification and operation, including the role of ERU in oversight, investigation, and sanctioning. The main change is that the burden of proof of compliance will lie with the regulated subject.
- Heating: The industry ministry has not taken into consideration the comments and objections made by the Czech chamber of commerce, which demanded some changes to be made to the heating section of the Act, mainly to prevent disconnections from DHS (through increasing the administrative burden of doing so). A minor change is presented by the redefinition of the state of emergency in heating. The ministry opposes regulating disconnections from DHS.[2]
- Authorizations for the building of new power generation sources above 1MW: All new sources above 1MW are required to obtain an authorization from the industry ministry on the project's accordance with the energy policy and the National Action Plan for RES.
- CHP: Support for CHP will be moved to the Act on the Support of RES (see below).

Probability High. The amendment to the Energy Act was completed on 1 September 2010 and sent to the legislative council. The legislative council should issue its statement by mid November 2010 and then pass it on to the cabinet.

Impact Medium. The impact of the proposed amendment on CHP, WtE, and DHS is secondary, as only minor changes in the amendment directly concern these sectors. The strengthening of the regulator could have an indirect impact. For RES, a controversial requirement of the amendment is that all installations above 100 kW should be possible to be dispatch-operated. As this would enable the operator to turn off the RES installation and in fact remove the advantage of priority grid connection, there has been vocal disapproval of this especially by the PV industry.

[2] Interview with Ladislav Havel, electric power department, ministry of industry and trade, 24 August 2010.

Title RES Bill

Description The Bill should only apply to new installations put into operation as of 1 January 2012.

- There will be a cap on the capacity of RES eligible for support for years 2012-2020 set by the National Action Plan for RES. The NAP serves as a roadmap towards achieving the Czech Republic's assigned goal of 13% of RES in final energy consumption.
- Only small RES up to 100 kW installations will be eligible to receive a stable feed-in tariff payment over the life-cycle of the installation. The feed-in tariff amount will be calculated using a 15-year simple investment payback guarantee. The support will be indexed by 2% annually, except for biomass, which will be indexed to the fuel cost. The maximum feed-in tariff is CZK 6,000/MWh (€ 240/MWh). Feed-in tariff may be lowered by maximum 5% year-on-year for new installations. If simple payback period falls to 12 years for any particular type of technology, the regulator may cut feed-in tariffs without any limit for all new installations. If the price of electricity becomes negative, RES electricity generator will be obliged to pay the negative price to the buyer.
- The green bonus should become the main support mechanism under the new Bill. The green bonus payment for RES will be set on an annual basis. It will be derived from the feed-in tariff, calculated as the difference between the feed-in tariff for the particular type of RES and the estimated daily price of electricity. Monthly and hourly bonus will be calculated from the yearly bonus through a formula established by the regulator.
- It will be possible for generators to obtain the support for RES or WtE, and the subsidies for CHP simultaneously. And support for the biological and non-biological part of waste can be combined.
- (!) WtE and CHP will also be supported under the green bonus scheme. However, the calculation of the green bonus for WtE and CHP will be different. For WtE, the bonus will be set by the regulator differently for the specific type of secondary source, location and capacity. The bonus will be indexed to electricity and heat prices, price of fuel, production efficiency, and the duration of operation. WtE installations will also need to comply with a minimum efficiency factor to be set by the industry ministry.
- The current system of payments for highly efficient CHP will be maintained with small changes and merely labelled the "green bonus." The bonus will be calculated yearly by the regulator based on location of installation, capacity, fuel and operational regime. It will be indexed to electricity and heat prices, price of fuel, production efficiency, and the duration of operation. Installations up to 5 MW will be able to choose a monthly or a yearly bonus to match their reporting schedules.
- The amounts for feed-in tariffs and green bonuses for 2011 and beyond are not yet available. The figures for 2011 will be calculated according to the currently valid Act on RES Support and announced in November this year by ERU. A major slash is expected for PV. Other types of RES and technologies are expected to be adjusted within the -5% margin. The figures for 2012 are likely to be calculated according to the new RES Support Bill and they will be announced in 2011.

Probability Medium. A group of ten solar and wind energy investors sent a letter to the legislative council calling for rejection of the Bill. However, the investors will probably not succeed in stopping the Bill. Also, the fee for the recycling of solar panels is still being discussed between the industry and environment ministries (which entity should collect it and how). The legislative council should give its statement by the end of October 2010 or after the recycling fees issue is resolved.

Impact High. The main differences between the new Bill and the current RES Support Act are switch to green bonus mechanism, greater emphasis on WtE and high efficiency CHP support, and buy-out of electricity by selected traders. Further changes include:

- The role of ERU in the policy process will be strengthened. The vague definition of the green bonus may enable ERU to adjust the support rather independently of public policy steering.
- Similarly, the role of the industry ministry will be reinforced, to the detriment of the environment ministry. Industry will concentrate in its portfolio the issuing of binding decrees on the supported types of biomass, on minimum efficiency, in addition to the existing powers regarding highly efficient CHP (issues certificates).
- On the private investment side, the development of RES could be slowed down, given the uncertainty about the financial effects of some provisions in practice (for example in situations with negative price of electricity).
- The NAP will newly serve as a strong regulatory instrument of RES development. Its application in practice may also create uncertainty on the market, though, because it will not be clear well in advance how much RES capacity will still fall within the NAP limits to be eligible for support.
- As the large players in the energy market – CEZ, EPH, Dalkia, Plzenska teplarenska – do not plan future significant investments in the sector, they are rather content with this effect of the Bill and NAP. However, Dalkia and CEZ may object to the ban on support for condensation biomass power plants.
- WtE development will likely receive a boost in the form of green bonus. Also, the industry ministry may overturn the ban on support for the incineration of bio-waste (as currently in the decree on the supported use of biomass) following the approval of the Bill.

Title **EU subsidies for biomass installations**

Description EU-funded Eko-energie programme, which is administered by CzechInvest, has CZK 3bn (€120mil) available for biomass and energy efficiency projects in its third call for projects. The programme has been criticized by some investors for awarding funding for biomass projects, which are not developed by bona fide investors but merely with the purpose of selling them to CEZ or one of the other large energy companies.

Impact Medium. The concurrence of investment support and feed-in tariffs support has also been criticized earlier. Combined with the near-shortage of dendromass on the market and a warning by

ERU chairman (joined by PM Necas) regarding speculative biomass investments, limitation on the use of biomass (such as 'co-generation only' clause in the new RES Bill) are a possible result.

Exhibit 1: Directive 2009/29/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community

Adopted in April 2009, the Directive sets new rules for CO2 emissions trading period 2013-2020. The main changes are the obligatory auctioning of allowances of installations participating in the scheme, which will cover a wider range of industries.

Power generation: No free allowances will be allocated for power generation in the Community, except for states that comply with conditions of Art. 10c of the Directive (Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania). These states will be allowed to gradually increase the share of auctioned allowances from 30% in 2013 to 100% in 2020 in exchange for investing the market value of the free allocation into modernization of energy infrastructure and clean technologies. The Czech Republic applied for the derogation already in 2009. Power generators had until end of June 2010 to submit their investment plans. The plans are subject to approval by the Commission, which will review them in 2011.

Heating: District heating installations and heat produced in high-efficiency cogeneration will be allocated free allowances. For free allocation in district heating, a benchmark based on a 93% efficient gas boiler will apply. Additional allowances for less efficient installations will be auctioned. In the Czech Republic, with a 35% share of coal-fired district heating systems, this presents a major problem as investments into efficiency of these installations may not be sufficient to maintain their competitiveness in the heating market. Besides the need to modernize or replace coal-fired boilers, investment into heating pipes would be necessary to decrease the currently rather high degree of losses. Such investment, however, will likely not be recognized by the Commission for the purpose of receiving free allocation of allowances.[3]

3 Interview with Tomas Klima, heating industry department head, ministry of industry, 5 November 2010

3. POLITICAL SYSTEM

Title **Municipal and Senate elections**

Description

Senate elections

The governing coalition lost its majority in the Senate this weekend. While ODS was generally expected to lose a lot of its senators as it defended 19 out of 27 senate seats, the failure of TOP 09 and especially VV is remarkable. TOP 09 in fact lost 3 Senate seats. VV merely failed to win any.

Table 1: Senate composition	
ČSSD	41
ODS	25
KDU-ČSL	6
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Severočeši.cz	2

ČSSD's victory in 12 districts will give the party a majority in the Senate (41 out of 81 seats) and one of the three top constitutional offices- the chairman of the Senate. We can expect the Social Democrats to delay legislative proposals by the government by amending them or outright rejecting them. As a result, the 118 vote majority of the coalition in the lower house will be constantly tested. The government will be hard pushed to maintain its reform agenda and failure to enact at least some of the major reforms (healthcare, taxes, pensions) may lead to the disintegration of the coalition. (see the list of newly elected senators in the appendix)

Municipal elections

Traditionally, most municipal assembly members belong to small local parties or are independent. Out of the nation-wide parties, ODS did seemingly best but it lost several of the larger towns to ČSSD-led coalitions. TOP 09 performed below expectations everywhere besides Prague where it won with a 7% lead over ODS. VV did badly everywhere. Its failure to win even a single seat in the main Prague assembly is a major blow and the party will probably disintegrate in all but name in the course of the next year or two. Prague City Hall will be run most likely by a coalition of ODS and TOP 09, with TOP's Tůma as mayor. A coalition of ODS and CSSD cannot be ruled out. Pressure from TOP 09 on ODS to purge Prague ODS party of bad apples will help ODS leader and PM Petr Nečas who has repeatedly distanced himself from the Prague party excesses of the past (see the composition of assemblies in major cities in the appendix). But such pressure is resented by Prague ODS, which much prefers to run the city with CSSD.

Table 2: Municipal elections- % of assembly members	
Local parties	50.8%
Independent	11%
ODS	7.4%
ČSSD	6.8%
KDU-ČSL	6%
KSČM	5%
TOP 09/ Mayors	4%

Probability High.

Impact High. As for the impact of the Senate elections, ČSSD's long-term position on energy and environment is very close to that of ODS. Cooperation of these two parties within the Senate economic committee has been traditionally good on energy issues. While partisanship may be a factor that will delay the adoption of the upcoming energy legislation in the Senate, it will be a minor problem compared to the shifting policy priorities of VV. After its failure in the Senate, VV's leaders have voiced their intention to pursue greener policies. This may manifest itself in a strict insistence on the maintaining of coal mining limits, which would complicate the adoption of a new energy strategy.

As coalitions in Pilsen, Karvina and Liberec have been confirmed, it appears that no significant change in energy policy will occur in these cities. In Pilsen, both ODS and ČSSD support the building of a WtE plant in Chotikov. City council in Karvina gave its approval for the building of WtE plant only three days after elections. In Liberec, VV, which campaigned on high heat prices, will not participate in the coalition.

4. REGULATION

Title **Amendment to the Act on accelerating the construction of transport infrastructure**

Description The lower house economic committee discussed the amendment to the Act on accelerating the construction of transport infrastructure, which would simplify permit proceedings for the construction of energy installations and networks. The amendment had been proposed by the Senate earlier this year in order to facilitate the construction of power lines, especially from new blocs of Temelin.

Deputy minister of regional development Kalous called on the committee to drop the proposal, citing ongoing preparation of a comprehensive change of the Construction Act, to be presented in 2011. He said that as part of this change, the ministry is considering the removal of construction permit proceedings completely for power lines.

Probability Low. The prospects of this amendment in the lower house are low as coalition parties TOP 09 and especially VV, which heads the regional development ministry, will probably be opposed or have significant objections. ODS supported the amendment with a reservation that the provision on merging land-planning and construction permit proceedings is taken out (against EU law). ČSSD and KSČM supported the amendment without reservations.

Impact Medium. The amendment would simplify the proceedings for obtaining a construction permit by cutting out local authorities and concerned citizens. While this may help the building of power lines for Temelin and other energy installations (RWE also supports the proposal), such permits may be also attacked on legal grounds for violating EU law.

Title **Decree on the conditions for connecting to electricity transmission network**

Description ERU submitted the draft decree for interagency scrutiny on 20 October 2010, until 11 November 2010. The decree enables the interconnection of daily electricity market with Slovakia and requires permanent provision for trading set according to the size of the clearing subject and traded volume.

Probability High.

Impact Low. The changes regarding trading provision are aimed at preventing an unexpected bankruptcy such as Moravia Energo, which had a financial impact on both the operator and other market participants.

Title **ERU decision 1/2010 regarding heat prices**

Description ERU published a decision on 11 October 2010 on the setting of heat prices. The principle of the regulation based on justified costs and reasonable profit has not been changed. The changes compared with the previous decision (7/2008 as amended by 3/2009) include:

- Threshold for ERU inquiry into the heat price formation has been lowered from 650 to 600 CZK/GJ (from €26 to €24 per GJ). If justified costs and reasonable profit exceed this threshold, the heat producer is obliged to inform ERU and include all price calculations;
- Minimum depreciation periods for technological parts of the heating system;
- For two component price, the decision allows the fixed component to form up to 50% of thr total costs and reasonable profit for gas-fired installations (up from 40% according to the previous decision), and up to 70% for renewable energy installations other than biomass (new category). For biomass and coal installations, the fixed component can be up to 60% of the total costs (unchanged).

Probability High. The decision will enter into force on 1 January 2011.

Impact Low. Despite a lower threshold, ERU's approach to the examination and regulation of heat prices remains unchanged. ERU is overwhelmed now with the new electricity and gas regulation related to the changing RES Support Act and the transposition of the Third liberalization package. Considering the current (and likely to persist) shortage of funding, ERU will struggle to deal with the main excesses that may occur in the heating market.

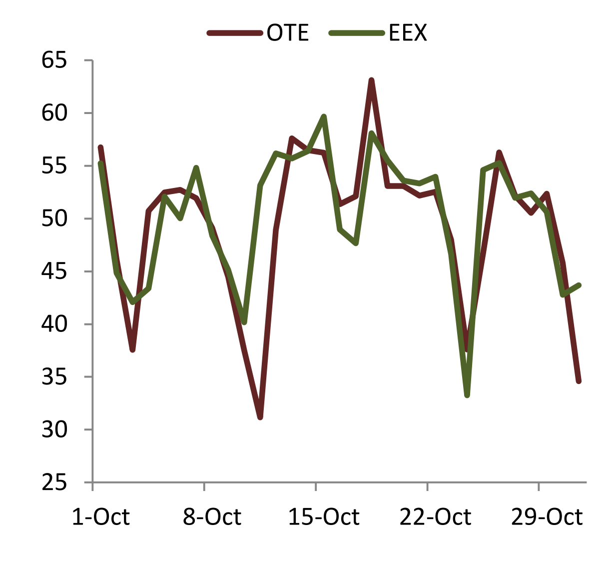
5. MARKET

5.1. Wholesale electricity price

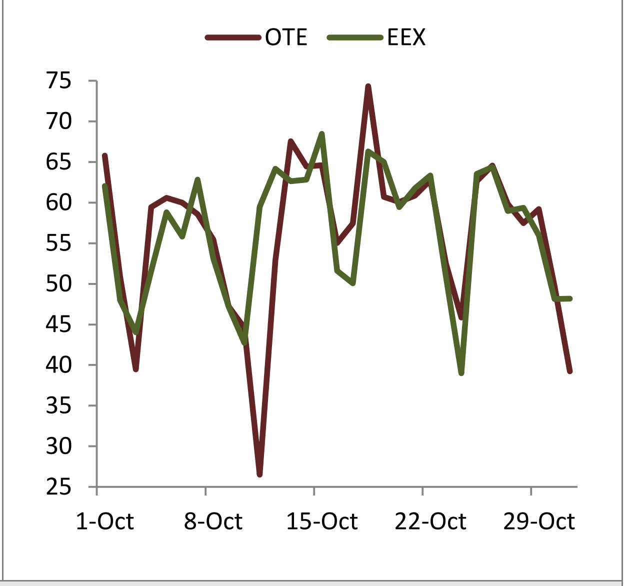
Chart 1: Electricity prices, futures and day-ahead markets (€/MWh)

a. Day-ahead

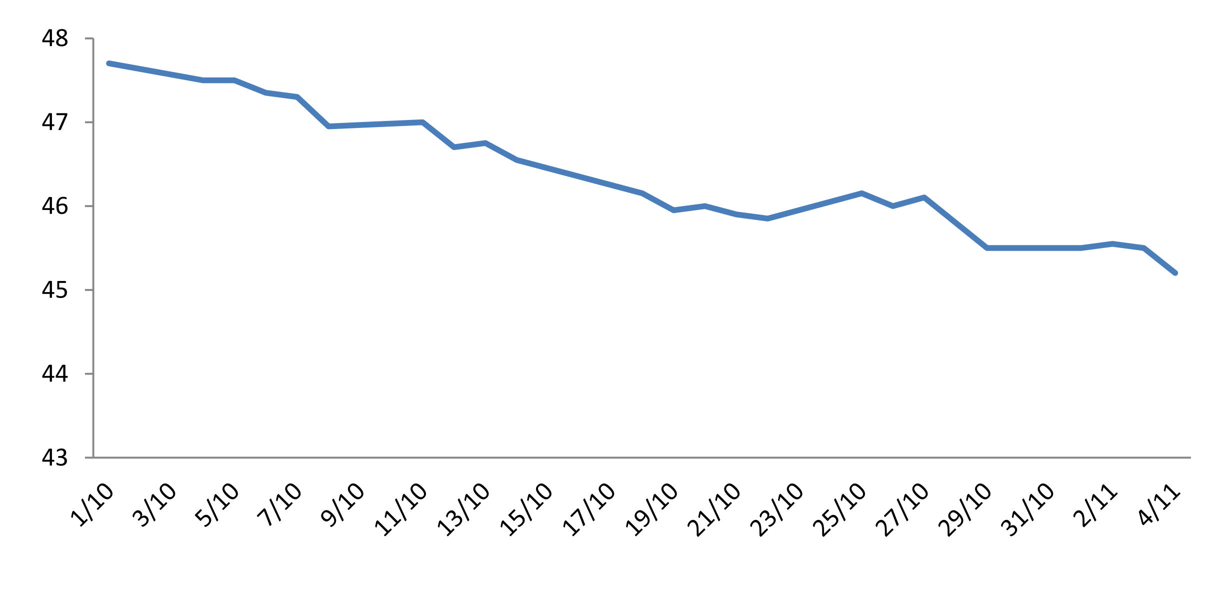
Baseload



Peakload



b. Futures



The average day-ahead market prices have stayed slightly below EEX benchmarking values (see Chart 1.a above). The average price for baseload had been €49.40/MWh, about €1/MWh below EEX price (€50.30/MWh). The average price for peak was 56.13/MWh, slightly less than EEX (€56.43/MWh).

Futures prices (1year, baseload, delivery 2011) have had a decreasing trend in October (see Chart 1.b). The average futures price has been €46.38/MWh, about €3/MWh less than the average day-ahead market price in the last month.

5.2. Competitors

Title **Delay of Temelin tender**

Description CEZ announced that the deadline for submitting bids was extended until Spring 2011. The government reserved the right for itself to decide on the winner of the tender, taking into account strategic and foreign policy factors.

CEZ stock fell to CZK 777 on 14 October 2010 following the news of this delay and the decision by the government to use emission allowances from energy companies to fund compensation for RES support.

Impact High. The drop is the result of several factors besides the news of the Temelin delay: The introduction of a gift tax on CO2 allowances and the solar tax will hit CEZ (estimated cost of the CO2 tax is about €280m)[4]; CEZ announced cuts to its capex programme, a sign of financial problems; and investors started to price in political risk.

Title **Energotrans deliveries**

Description EPH spokesman said that Energotrans will switch to gas or biomass if Czech Coal demands higher prices. He added that Energotrans director, Jan Springl, continues to prefer Czech Coal.

Impact Medium. Energotrans is, alongside Opatovice, the biggest customer of Czech Coal. Losing Energotrans as a customer might place Czech Coal in dire financial difficulties since the domestic market is too small for the amount of lignite Energotrans consumes and long-distance transport makes it uncompetitive.

Title **Tauron in the CR**

Description Polish Tauron established Tauron Czech Energy, joined PXE, and is considering entering Slovak electricity market.

Impact Medium. CEZ will have significant competitors in Polish energy companies since they are cost competitive and have their own generation assets.

[4] Atlantik, 3 November 2010, www.atlantik.cz

Title **Plzenska teplarenska**

Description. The sale of the profitable heating company in Pilsen was one of the issues in the local communal elections campaign. The Social Democrats and TOP 09 oppose the sale and accused ODS of wanting to sell it exclusively to EPH. Czech Coal and MVV Energie are allegedly also interested in the asset. The municipal elections outcome- a coalition of ODS and ČSSD- is ambivalent.

Impact Medium. Plzenska teplarenska belongs to larger heating firms in the Czech Republic (137 MW installed electrical capacity, 483.8 MW installed thermal capacity). Its sale to EPH would make the Czech market more concentrated and would harm Czech Coal, which may lose a customer (EPH co-owns MIBRAG coal mines with CEZ and they could supply EPH's heating plants).

Title **Plzenska teplarenska's consumption increases biomass prices in region**

Description Mayor of Hartmanice, which owns a small municipal co-generation unit, complained that prices of dendromass in the region increased to unacceptable levels because of the high consumption by Plzenska teplarenska.

Impact Medium. There is a concern that smaller and less efficient heating plants would be unable to match prices for dendromass and straw if new efficient projects are completed and come on line.

Title **EPH suspended biomass project in Opatovice**

Description EPH suspended a project for a biomass furnace in Opatovice worth CZK 800m and cancelled the tender for a 100 MW turbine. The spokesman said EPH would continue the project upon the approval of the new RES Bill.

Impact Medium. Projects are put on hold until the new RES Bill enters into force because banks are refusing to finance those projects, but require equity investors to pledge assets as collateral to spread the risk.

Title **RWE's gas storage capacity auction failed**

Description RWE failed to auction out 135m cubic meters of underground gas storage capacity for 2011. The reason is low spot prices of gas due to market surplus.

Impact Medium. It appears that commodity markets are going sideways. Suppliers which are not burdened by relatively expensive long-term contracts are thus in competitive advantage now.

Title **RWE East based in Prague**

Description As part of restructuring, RWE will create RWE East in Prague to head its central- and south-eastern European operations. Net4Gas will remain under the control of the German headquarters.

Impact Low.

Title Gazela construction started

Description NET4GAS launched the construction of the 170km, CZK 10bn, Gazela pipeline connecting the CR to Nord Stream.

Impact Medium. The reverse flow pipeline will enhance CR's security of gas supply and potentially alleviate some of the concerns on the share of gas in the Czech energy mix.

Title Moravia Energo project sold

Description Project of a gas-fired power plant started by Moravia Energo, which cost CZK 500m to develop, was sold to an unknown buyer for CZK 212m. Accodring to the paper, the buyer is Marian Choma (Right Power, Ferona), who is close to Tomas Chrenek.

Impact Low.

Title Energy heating plant in Usti for sale

Description Czech Coal is looking into buying Tomas Pitr's heating plant in STZ Usti.

Impact Medium. The heating plant has a long-term coal delivery contract with Severoceske doly. Also, it recently received a construction permit for a new 32 MW coal fired cogeneration unit.

Title Decision on Dukovany-Brno heating pipe delayed

Description CEZ and city heating company in Brno delayed the decision to build a heating pipe until a new energy supply strategy of Brno is adopted by the newly elected municipal assembly. The assembly should also decide on the inclusion of a peak-load gas-fired plant in the Brno energy strategy. Both projects have already won an environment ministry approval.

Impact Low. The projects are likely to win assembly approval.

Title Changes in PRE

Description PRE, electricity distributor and supplier in Prague, has finalized the asset swap between EnBW and EPH by appointing new supervisory board members from EnBW (Hans Peter Villis, Martin Konermann, Peter Krampf). Also, the long-time CEO of PRE is retiring at the end of October, to be replaced by Pavel Elis, current trading and services division director.

Impact Low.

Title Environment minister supported WtE Chotikov

Description Environment minister Pavel Drobil (ODS) stated in Pilsen that WtE plant in Chotikov, a project of the city and Pilsen heating company, is in line with the environment ministry's strategy on waste management. He added that his priorities in this area are waste prevention and WtE.

Impact Medium. His statement can be seen as a promise of EU funding for the WtE plant.

Title **E.ON to take over Prazska plynarenska**

Description E.ON applied to the European Commission for an approval of its takeover of Prazska plynarenska, a gas supplier in Prague. The Commission granted its approval to the merger. E.ON stated that this was a preliminary inquiry and that there were no ongoing ownership structure changes.

Impact Medium. The move follows the swap of assets between EPH and EnBW, which gave EnBW a majority in PRE, the Prague electricity distributor.

6. APPENDIX

Table 4: Newly elected senators					
Turnout	**25%**				
District	**Replacing**		**Elected senators (party, % of votes)**		
Karlovy Vary	Jan Horník	indep.; TOP 09	Jan Horník	TOP 09	71%
Most	Vlastimil Balín	KSČM	Alena Dernerová	S.cz	65%
Plzeň-jih	Jiří Šneberger	ODS	Dagmar Terelmešová	ČSSD	54%
Český Krumlov	Tomáš Jirsa	ODS	Tomáš Jirsa	ODS	55%
Tábor	Pavel Eybert	ODS	Pavel Eybert	ODS	51%
Beroun	Jiří Oberfalzer	ODS	Jiří Oberfalzer	ODS	52%
Praha 11	Jan Nádvorník	ODS	Milan Pešák	ODS	57%
Praha 10	Jaromír Štětina	indep.; TOP 09	Jaromír Štětina	TOP 09	58%
Praha 6	Karel Schwarzenberg	TOP 09	Petr Bratský	ODS	50.16%
Mělník	Jiří Nedoma	ODS	Veronika Vrecionová	ODS	56%
Ústí n. Labem	Pavel Sušický	ODS	Jaroslav Doubrava	S.cz	56%
Liberec	Přemysl Sobotka	ODS	Přemysl Sobotka	ODS	54%
Jičín	Jiří Liška	ODS	Josef Táborský	ČSSD	54%
Kutná Hora	Bedřich Moldan	ODS	Jaromír Strnad	ČSSD	60%
Pardubice	Jiří Stříteský	ODS	Miluše Horská	indep.	52%
Ústí n. Orlicí	Ludmila Müllerová	TOP 09	Petr Šilar	KDU-ČSL	56%
Blansko	Vlastimil Sehnal	ODS	Jozef Regec	ČSSD	54%
Jihlava	Václav Jehlička	indep.; TOP 09	Miloš Vystrčil	ODS	59%
Brno-venkov	Tomáš Julínek	ODS	Jan Žaloudík	ČSSD	67%
Brno-město	Rostislav Slavotínek	KDU-ČSL	Stanislav Juránek	KDU-ČSL	54%
Olomouc	Jan Hálek	ODS	Martin Tesařík	ČSSD	55%
Bruntál	Jiří Žák	ODS	Jaroslav Palas	ČSSD	63%
Nový Jičín	Milan Bureš	ODS	Zdeněk Besta	ČSSD	60%
Ostrava-město	Liana Janáčková	indep.; ODS	Antonín Maštalíř	ČSSD	53%
Frýdek-Místek	Igor Petrov	SNK; TOP 09	Petr Gawlas	ČSSD	51%
Kroměříž	Zdeněk Janalík	ODS	Miloš Malý	ČSSD	54%
Hodonín	Alena Venhodová	ODS	Zdeněk Škromach	ČSSD	56%

Table 5: Municipal elections- assembly members									
Turnout	**49%**								
City	**ODS**	**TOP 09**	**ČSSD**	**KSČM**	**Local parties**	**KDU-ČSL**	**VV**	**Greens**	**Coalition**
Prague	20	26	14	3					ODS+CSSD (not final)
Kladno	13	2	8	4	6				ČSSD+ODS
České Budějovice	8	6	10	6	15				ODS+ČSSD (not final)
Pilsen	14	7	14	5	7				ODS+ ČSSD
Karlovy Vary	7	4	7	4	16				Local+TOP 09
Ústí nad Labem	9	5	11	5	7				ODS+ČSSD
Liberec	8		7	3	18		3		Local+ČSSD
Hradec Králové	6	4	8	5	12	2			Local+ODS (not final)
Pardubice	7	3	11	4	14				Local+CSSD+TOP 09
Jihlava	10	4	11	7	3	2			ČSSD+ODS+KDU-ČSL
Brno	14	9	19	4		6		3	ODS+ČSSD
Olomouc	14	6	17	5		3			ODS+TOP 09+KDU-ČSL
Zlín	6	11	7	3	9	3	2		Local+TOP 09+KDU-ČSL
Ostrava	12	4	21	8	10				ČSSD+ODS

CANDOLE PARTNERS

ENERGY SECTOR IN ROMANIA

DISTRICT HEATING, COGENERATION & WASTE-TO-ENERGY

OCTOBER 2010

1. EXECUTIVE SUMMARY

- Hidroenergetica claims it would restructure its coal-fired generation portfolio once the company is created. Coal-fired capacities might be cut by half.
- The government will distribute about 1.6bn tons of coal and over 178,000 tons of fuel oil from the state reserves to local CHPs and the energy compounds.
- The interior minister will transfer RON 165mn to indebted CPHs. The funds will be used to repay debts generated by fuel and transportation costs.
- The economy minister has posted for debate an action plan on emergency situations in the gas supply sector. The draft forecasts a 5.7bn cubic meters of gas to be extracted for winter 2010/2011. It is likely that Romania will have to import gas this winter.
- Media revealed tapes which suggest that top PDL politicians have lobbied Hidroelectrica to sell cheap electricity output to ALRO Slatina, an aluminium plant. The regional development minister, Elena Udrea, her husband and another top PDL politician, Theodor Stolojan, have been the targets of these allegations.
- The regulator published two drafts on the secondary legislation necessary to implement the cogeneration support mechanism. The first draft explains the methodology on calculation of co-generation contribution paid by electricity traders. The second draft provides the methodology on payment of co-generation bonus to high efficient CHP producers.
- The co-generation Bill in parliament has received a negative opinion from the government. The economy and legal committees in the Senate gave their approval. The Bill will be discussed in the upper house in November.
- The average electricity price on OPCOM's day-ahead market was below OTE and EEX prices. OPCOM's average price for baseload (€42.02/MWh) was about 15% lower than OTE price (€49.40/MWh) and EEX price (€50.30/MWh). The average price for peak at OPCOM (€45.32/MWh) was about 19% lower than OTE (€56.13/MWh) and EEX (€56.43/MWh).

2. PUBLIC POLICY UPDATES

2.1. Energy strategy

Title **Hidroenergetica to invest in the coal fired generation sector**

Description Hidroelectrica's director for operations stated that Hidroenergetica would modernize the production capacities of Electrocentrale Deva and Electrocentrale Bucuresti power plants, dropping net capacities down from 2,000MW to 1,100MW. He stressed the importance of investing in the mining sector and in the thermal power plants which will be included in the two companies. He argued that the coal-fired sector is too important for Romania to be abandoned and that Hidroelectrica and Nuclearelectrica have "moral obligations" to help coal-fired generators survive.[1]

Probability High. It is likely that the creation of the two energy companies will not be finalised sooner than 2H 2011.

Impact High. There are several serious consequences of the government's hectic policy in the energy sector. First, the government does not think that competition is essential for the energy sector. Second, the government does not have a concrete plan of what it wants to achieve in the energy sector after the creation of the national champions. Third, the government is willing to sacrifice profitable electricity generators (Hidroelectrica and Nuclearelectrica) to save the coal-fired generators (particularly Mintia Deva, Paroseni and the three energy compounds) and the mining sector which do not have access to the credit market. Fourth, the government is unwilling to close down unprofitable energy firms. By creating two vertically integrated firms, the government hopes, unrealistically, that the managements of the national champions would be able to close down the bankrupt subsidiaries without social and political tensions.

2.2. Public policy in the energy and environment sectors

Title **The government will allocate local DH firms with coal and fuel oil from the government reserve for 2010/11 winter**

Description The government will distribute about 1.6bn tons of coal and over 178,000 tons of fuel oil from the state reserves to DH operators this winter (see Table 2 in the Appendix). CHPs, heat producers and energy compounds are allowed to borrow coal and fuel oil from the state reserves due to insufficient stocks for this winter. The quantities have to be returned by end May 2011. The largest amount of coal will be allocated to EC Craiova (0.3mn tons), CHP Bacau (0.25mn tons) and CHP Govora (0.2mn tons), while the largest quantity of fuel oil will be distributed to Elcen Bucuresti (50,000 tons).

[1] *He used the notion of "nuclear and hydropower rent", meaning the obligation of hydropower and nuclear operators to subsidize coal fired generators due to lower operational costs, which decreases the competitiveness of the coal-fired sector on the market.*

CHP Bacau, CHP Brasov, Colterm Timisoara, CHP Iasi and Electocentrale Deva will be allowed to borrow only after they return the previously contracted quantities of fuel. The government allowed state-owned energy companies and CHP power plants earlier this year to borrow 1.9bn tons of coal and 172.9mn tons of fuel oil with reimbursement date October 31st, 2010. Some firms failed to return the fuel to the state reserves.

Exhibit 1: Nuclear status in Romania

The Romanian government intends to build two new reactors (1440MW installed capacity) at Cernavoda nuclear power plant operated by Nuclearelectrica. The EUR 4bn worth investment was initially planned to be financed mainly by foreign nuclear generators interested to participate in the project. Driven by economic nationalism, the government finally decided in 2008 to keep the majority stakes (51%) in the newly created special purposed vehicle, EnergoNuclear, while the remaining 49% were divided among Enel (9.15%), CEZ (9.15%), GDF Suez (9.15%), RWE (9.15%), Iberdrola (6.2%) and ArcelorMittal (6.2%). However, the financial turmoil of the central budget made this financial scheme unsustainable. The government now intends to reduce its participation to around 25-30% but fears it would be accused by the Opposition and media of giving up strategic generation assets to private firms. CEZ also announced in September that it would withdraw from the project. The government's indecision means that the project is blocked and construction of the reactors postponed. It is unlikely that the stalemate will be resolved soon.

Probability In force. The decision was published in the official gazette.

Impact High. The news confirms that CHP and DH producers are insolvent and they cannot operate without large state subsidies. As fuel costs represent about 80% of operational costs of most CHP producers, the heat producers need the government's intervention to be able to deliver heat this winter.

Title **The government to transfer RON 165mn to CHPs**

Description The interior minister will transfer RON 165mn as subsidies to indebted CPHs. The funds will be used to repay debts toward the lignite national company (total RON 148.3mn) and national railway freight company (total RON 16.9mn). The highest amounts will be allocated to CHP Govora (RON 41.06mn) and to CHP Arad (RON48.06mn). See Table 3 in the Appendix for further details.

Probability In force. The decision was published in the official gazette.

Impact High. The news confirms that CHP and DH producers are insolvent and they ca not operate without significant state subsidies.

Title **The economy minister has posted for debate a plan for safety emergency situations related to gas supply**

Description The plan forecasts that 5.7bn cubic meters of gas needs to be extracted for winter 2010/2011. Romgaz plans to produce 3bn cubic meters, while Petrom estimates an output of 2.54 cubic meters, the rest being extracted by small companies such as Amromco Energy, Foraj Sonde Craiova and Aurelain Oil&Gas. Suppliers' stocks stood at 2.94bn cubic meters as of end September, slightly lower than the projected target to be achieved by year end (3.03bn cubic meters). It is likely that Romania will have to acquire imported gas. According to the economy minister, the natural gas import rate for household consumers has increased lately which would increase the gas price. No official figures have been provided so far. The minister claimed it would stop delivering natural gas to chemical industry producers and companies in the energy sector at preferential costs, as has been the case to date.

The gas sector is considered to be main priority of the government and plans to interconnect Romania with neighbouring countries are now being written. The Arad-Szeged gas pipeline was opened and Romania could start importing gas from Hungary end October. Export of gas is not yet possible due to technical difficulties. The interconnection with Bulgaria through Giurgiu-Ruse pipeline is likely to be set up by the end of next year.

Probability High. The decision was posted for debate on the economy minister website. It will be debated in the government meeting by end November and will be published in the official gazette by mid December.

Impact Medium. The planned interconnections are likely to increase local gas prices. Domestic electricity generators will have to buy more expensive imported gas to fuel their gas-fired power plants, if gas exports will increase.

Title Electrica is likely to sell 10% of shares to its employees

Description The government plans to allow the distribution company Electrica to sell up to 10% of shares to its employees' union. Furthermore, Electrica is given the right to sell 10% of the shares held in Electrica Moldova (controlled by E.ON) and Electrica Muntenia Sud (controlled by Enel) to its employees. However, the draft decision published by the government for consultations fails to address several points. First, it does not clarify what happens with a previous government decision which set December 2010 as the deadline for the transfer of shares to employees. Since implementation of the share transfer will probably be extended into 2011, it is unclear if the employees will be allowed to buy the shares next year. Second, it is unlikely that the employees will have enough liquidity to buy the shares in one tranche, as the current draft states.

Probability Medium. The decision was posted for debate on the economy minister website. It will be debated in the government meeting by end November and is unlikely to be approved.

Impact Medium. The policy would reduce government control over state-owned electricity distributor as 10% will be transferred to private sector.

3. POLITICAL SYSTEM

Title **Regional development minister said to lobby Hidroelectrica to sell cheap electricity to Alro**

Description Media released tapes which suggest that top politicians have lobbied Hidroelectrica to sell cheap electricity to ALRO Slatina, an aluminium plant. The regional development minister, Elena Udrea, her husband and another top PDL politician, Theodor Stolojan, are implicated.

Hidroelectrica CEO, Mihai David, accused the former Liberal economy minister, Varujan Vosganian, of obliging Hidroelectrica to buy electricity outputs from the coal-fired power plant Paroseni in 2008. Hidroelectrica has been asked to buy 1TWh annually from CHP Paroseni at prices ranging from RON 179 to RON 230/MWh, which is considerably higher than the market price for regulated contracts. The price for regulated contracts stood at RON 158/MWh mid 2010 and RON 157/MWh mid 2009. The deal represented a hidden subsidy for the financially troubled coal-fired generator.

Probability High.

Impact High. There are several implications. It would seem to confirm that corruption is endemic in the electricity trading sector. Second, it appears to show that Hidroelectrica is obliged to subsidise coal-fired generators. Third, it seems to demonstrate market collusion between state-owned generators, which are supposed to be competitors.

Title **Transelectrica's head steps down**

Description Adrian Baicusi, general manager of Transelectrica announced his resignation. It is likely that the new general manager will be Stelian Gal, Baicusi's predecessor. Gal was head of Transelectrica subsidiary in Sibiu between 2002-2005 and head of Transelectrica between 2005-2009.

Probability Confirmed. The resignation will take effect by 15 November 2010.

Impact Low.

4. REGULATION

Title Draft regulation on payments of bonuses for high efficiency cogeneration[2]

Description The draft regulation sets out the procedure on how bonuses for high efficiency co-generation will be paid to CHP producers. Electricity suppliers to end consumers will pay a monthly co-generation contribution to Transelectrica which is the product between the annual value set by ANRE multiplied by their monthly electricity output sold to final consumers. Traders who import CHP output are eligible to be reimbursed by Transelectrica with the value of co-generation contribution multiplied by the imported output. CHP producers will be paid a monthly sum which is the product between the bonus value multiplied by electricity output certified by ANRE of high efficiency.

Transelectrica will review annually the conformity between the monthly payments and annual information provided by ANRE and CHP generators. In case of differences, the TSO will pay/be paid the differences in Q1 on the following year for the last year.

The process of paying the co-generation bonus is the following:

1. Traders notify Transelectrica on their total electricity sales or exports in the previous month;
2. Transelectrica verifies traders' notifications and calculates the monthly payments which are due by traders. Invoices are sent to traders in maximum 12 days from the beginning of the month;

Exhibit 2. Status of the CHP support mechanism in Romania

ANRE has to publish two additional regulations to fulfil its obligation regarding the implementation of the support mechanism for high efficiency co-generation. The first regulation is the overcompensation methodology. The second is the methodology on the monitoring the implementation of the support scheme. ANRE estimates that the two regulations will be implemented only by 1Q 2011.

Nonetheless, ANRE intends to start the support mechanism by 1 January 2011, claiming that the two regulations are not mandatory at this time. The broad principles of the overcompensation methodology will be published by December this year.

Transelectrica is unhappy that the implementation of the support scheme will start in winter, the peak season for co-generation. It argues that this would increase the financial burden on the firm in the short run and would cause operational troubles. Transelectrica is obliged to pay CHP bonuses monthly, whilst electricity traders would pay their CHP contribution only in the rhythm of their collection rates. The financially constrained TSO would have to make another costly loan to finance the scheme in the short run.

Meanwhile, ANRE has qualified the CHP output for 2011 which will benefit of the co-generation bonus. The total qualified output is 6.2TWh (2.6TWh less than in 2010), which represents about 2050MW installed capacity to benefit of the support mechanism.

ANRE and Transelectrica regard the CHP Bill in parliament as a threat to the current scheme, claiming that the European Commission may stop the application of the state aid until the legislation is put in order by the government. They also acknowledge that by supporting the current inefficient CHP plants (intention of the Bill in parliament), appeal of investments in high efficiency CHP would drop.

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[2] *Interviews with Viorel Alicus, director of prices, ANRE, Nicolae Opris, director of corporate strategy, Transelectrica on 1 November 2010.*

3. Traders pay the monthly contribution in 7 days after they received the invoices, but not later than 25th day of the month;
4. CHP producers send their invoices to Transelectrica before the 27th day of the month;
5. Transelectrica pays the bonus to CHP generators in maximum 30 days after the end of the month;
6. Electricity traders importing CHP outputs of high efficiency may ask Transelectrica to be reimbursed for outputs sold directly to final consumers in 60 days after the month of import. Transelectrica will reimburse traders in maxim 30 days after it has been notified.
7. In 1Q of the year, ANRE calculates the total output in the previous year of each CHP producer which should have benefited of the support mechanism for cogeneration. Transelectrica calculates if any imbalances between monthly payments and ANRE annual calculations occurred and corrects them in maxim 7 days after ANRE publishes the results.
8. In 1Q of the year, Transelectrica calculates if any CHP producer has been overcompensated. In case of overcompensation, Transelectrica will invoice it to reduce the revenues from the CHP support mechanism. Overcompensated CHP producers have to pay the respective sums in 7 days after they have been invoiced.

Probability The document is a first draft published as discussion paper. It is likely that ANRE will publish an updated version in the following weeks. The updated draft is likely to be adopted by the end of the year.

Impact Medium. The draft regulation is part of the secondary methodology necessary to be adopted to make the co-generation support mechanism operational.

Title **Draft methodology on calculation of CHP contributions paid by electricity traders**

Description The draft regulation sets out the calculation methodology on fees paid by electricity traders as contribution to support mechanism for co-generation. The calculation formulas are detailed in the Table1 below.

Probability The document is a first draft published as discussion paper. It is likely that ANRE will publish an updated version in the following weeks. The updated draft is likely to be adopted by the end of the year.

Impact Medium. The draft regulation is part of the secondary methodology necessary to be adopted to make the co-generation support mechanism operational.

Table 1: Draft methodology on calculation of CHP contributions	
Formula	**Parameters**
$C_{cog} = T^{t+1} + T_{cor}$ [RON/kWh]	C_{cog} – Contribution fee for co-generation of high efficiency T^{t+1} - Tariff paid to Transelectrica for administration of co-generation support scheme T_{cor} – Adjustment fee applied in the regularization period
$T^{t+1} = (C_{admin}{}^{t+1} + C_{bonus}{}^{t+1} + C_{return}{}^{t+1} + C_{fin}{}^{t+1})/(E_{consum} + E_{exp})$	C_{admin} – Transelectrica's administrative costs of the support scheme in year *t+1*; C_{bonus} – Bonus payments to CHP producers by Transelectrica; C_{return} – Transelectrica's cost of reimbursing electricity traders which import CHP outputs of high efficiency; C_{fin} – Transelectrica's financial costs (interests rates) of running the support mechanism; E_{consum} – Total electricity output sold to final consumers [kWh]; E_{exp} – Exported electricity output [kWh];
$T_{cor} = (S_{bonus} - S_{nbonus} - S_{overcomp} - \Delta S_{fin} + \Delta S_{bonus} + \Delta S_{ret} + \Delta S_{other}) / (E_{consum} + E_{exp})$	S_{bonus} – sums paid by the TSO in the regularization period to CHP generators; S_{nbonus} – sums received by the TSO from CHP generators for outputs not qualified by the regulators as high efficiency co-generation; $S_{overcomp}$ – sums received by the TSO from overcompensation procedures; ΔS_{fin} – balance of financial costs in the regularization period; ΔS_{bonus} – balance of bonus costs in the regularization period; ΔS_{ret} – balance of the TSO's cost with reimbursing electricity traders which import high efficiency co-generation outputs; ΔS_{other} – balance of other costs to be repaid in the regularization period.

Title **CHP Bill in parliament**

Description The CHP Bill in parliament has received a negative opinion from the government, which argues that the Bill increases the costs paid by consumers without stimulating new investment in co-generation. Nonetheless, the Bill has received favourable opinions from the judicial and economic committees in the upper house.

Probability High. Iulian Iancu, the sponsor of the Bill, has been successful in promoting the current renewables law in parliament, despite ANRE's tacit opposition. Lobbying by municipalities will make MPs vote for the Bill. We expect it to be discussed in the plenum of the upper house in November.

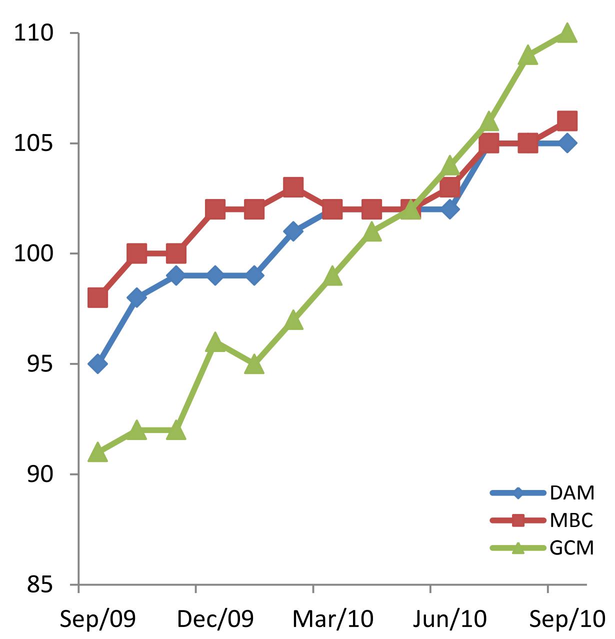
Impact High. The Bill sets several principles which are beneficial to CHP generators. Nonetheless, by dividing the sector between efficient co-generation and co-generation of high efficiency, the Bill allows the current inefficient co-generation to receive a state aid (the red certificate scheme). The red certificate scheme will have to be scrutinized by the European Commission, which may oppose such state aid and will delay application of any support mechanism for co-generation by 6-12 months.

5. MARKET

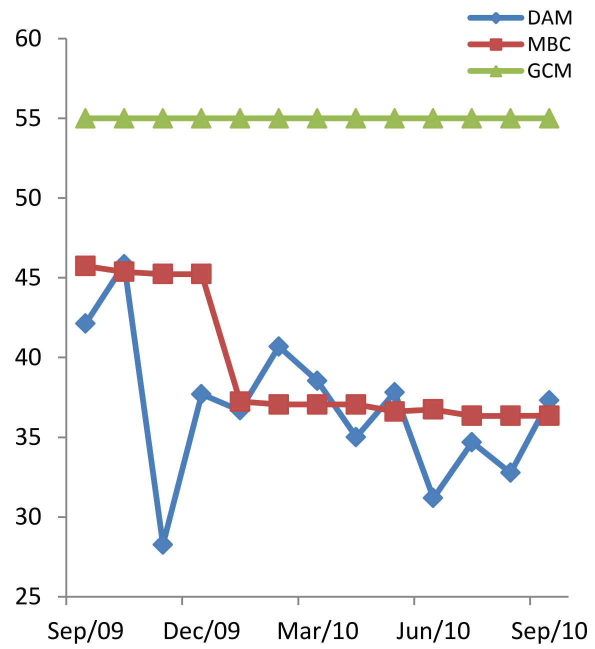
5.1. Wholesale electricity price

Chart 1: Electricity market results

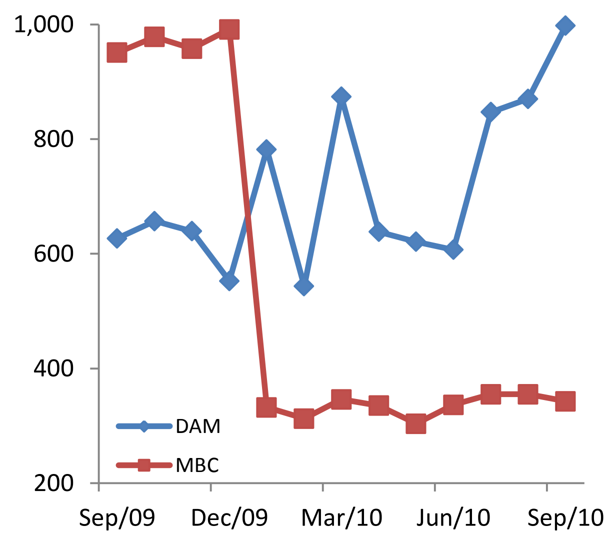
Number of participants, DAM, MBC, GCM



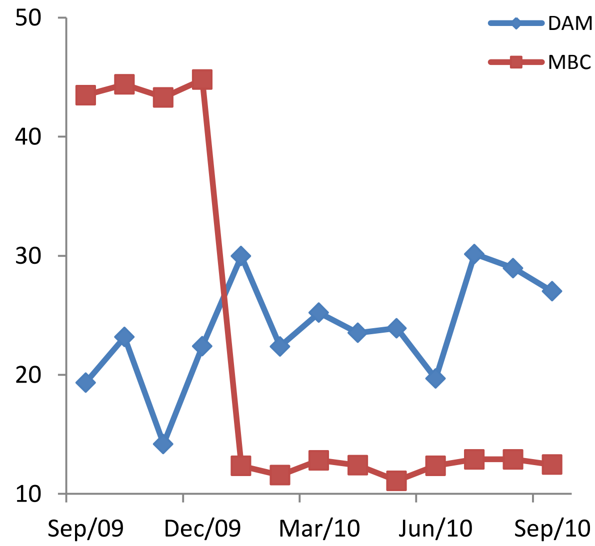
Average price (€/MWh)



Traded volume (GWh)



Transaction values (€ mn)



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The average price on the day-ahead market decreased by about €5.5/MWh to €37.31/MWh (about 11% lower y/y) in September 2010 compared to the previous month (see Chart 1). The traded volume increased by about 128GWh compared to August 2010 to 998GWh (60% higher y/y). The transaction value decreased by about €2mn, standing at €27.02mn, about 40% higher y/y. The rising transaction volume traded on the day-ahead market is explained by the increasing industrial demand trend recorded in the last months.

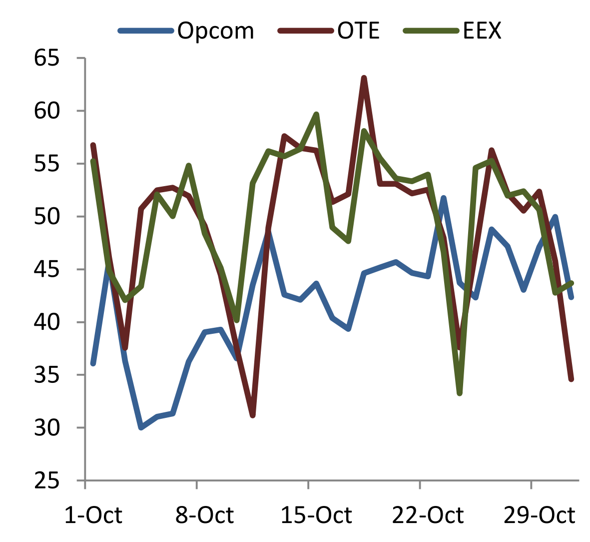
The average electricity price on OPCOM's day-ahead market in October was below OTE and EEX prices (see Chart 2 below). OPCOM's average price for baseload (€42.02/MWh) was about 15% lower than OTE price (€49.40/MWh) and EEX price (€50.30/MWh). The average price for peak at OPCOM (€45.32/MWh) was about 19% lower than OTE (€56.13/MWh) and EEX (€56.43/MWh).

The average electricity price on the market of bilateral contracts (MBC) in September remained the same as compared to the previous month, to €36.34/MWh. Traded volume has slightly decreased by about 3% to 343GWh (about 2.8 times lower y/y). The total value of transactions has slightly decreased by about 3.5% to €12.5mn and was about 3.5 times lower y/y.

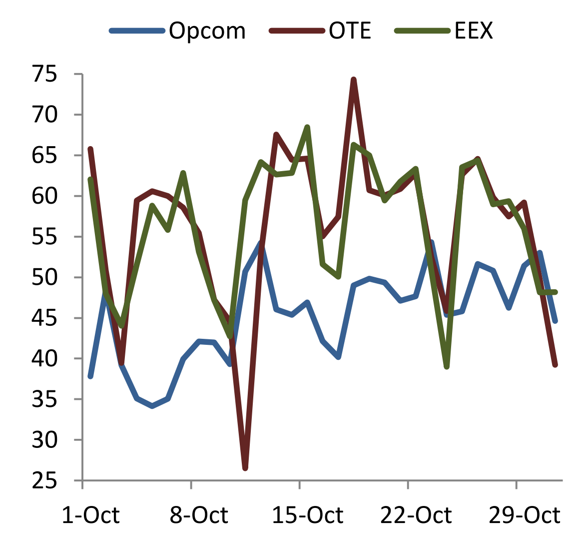
The market price of green certificates stayed at €55/GC in September. The number of GC traded was 3,346, a drastic decrease as compared to previous month and about 7 times lower y/y. CEZ has already received its first green certificates for the output of the 325MW wind farm but has not traded them yet. High new supply of RES electricity production (announced wind farm projects with an installed capacity up to 3,000MW) is likely to decrease GC price down to the current floor price of €28/GC.

Chart 2: Daily day-ahead market price, October 2010

Baseload (€/MWh)



Peak (€/MWh)



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5.2. Competitors

Conventional electricity

Title Hidrolectrica has extended half of its 17 OTC electricity sale contracts[3]

Description The company announced it has extended about half of its bilateral contracts until 2017. The average price for total OTC market stood at about RON 130/MWh in 2010, as announced by ANRE. Hidroelectrica's production costs reached RON 90/MWh this year. Hidroelectrica's chairman argues that hydropower prices on OTC contracts will further increase next year after it has recorded a 30% increase this year as compared to 2009.

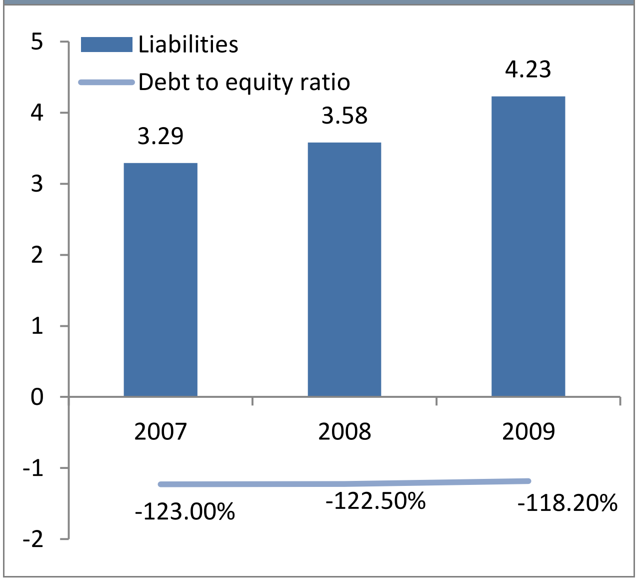
Impact High. The news confirms that most of Hidroelectrica's output is sold through non-transparent bilateral contracts rather than through Opcom's platforms. Analysts point out that about 12TWh of total Hidroelectrica's output last year (17.3TWh) are sold through OTC contracts.

Title National hard coal company CNH Petrosani to close down 3 out of 7 mines

Description The company is likely to be divided in two by the end of the year to reduce losses. Petrila, Uricani and Paroseni mines will be closed down due to inefficiency and increasing debts. Lonea, Livezeni, Vulcani and Lupeni mines are likely to be integrated into Hidroenergetica or to work in partnership with the vertically integrated energy company. The four mines will conclude long-term coal purchase contracts with Hidroenergetica.

The national coal company is closely monitored by the IMF and forced to reduce its outstanding debts. The company's current liabilities amount to some €1bn. The negative debt to equity ratio shows the dreadful financial leverage of the company (Chart 3).

Chart 3: National hard coal company, Liabilities (RON bn) and Debt to equity ratio, %



Source: CP research

Impact High. The news confirms the bankruptcy of the mining sector in Romania and explains why the government desperately pursues the policy of creating two vertically integrated energy firms.

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[3] *Enel Muntenia, Enel Furnizare (Energie), CEZ Vânzare, CEZ Distribuţie, E.ON Furnizare, Luxten Lighting, Euro PEC, Electromagnetica, Alro, Energy Holding, Energy Financing Team, Alpiq Romenergie (EHOL Distribution), Alpiq Romindustries (Buzmann Industries), Elsid, Electrocarbon, Arcelor Mittal Galaţi and National Coal company*

Title CHP Oradea will upgrade its assets, an investment worth €70mn

Description The company will purchase a 20MWt gas turbine, three boilers and two main heat transmission pipelines. The municipality will announce the auction by end of November and will organise a public procurement by end of year. City hall's officials stated that they are currently drafting the tender documentation. No other details were revealed. The €70mn investment will be financed 50% from EU funds, 45% from the state budget and 5% will be financed from local budget.

Impact Low.

Title Ecoterm plans to build a co-generation power plant worth RON 74mn[4]

Description The group will set up a co-generation power plant fuelled by biomass in the south-western Romanian town of Resita. The investment is worth €74mn and it is to be financed from own sources and EU funds. Ecoterm plans to conclude a contract with an engineering company to complete the works in 18 months. The contract will be assigned through open bid and offers are to be submitted by December 9, 2010.

Impact Low.

Title CHP Braila decreases its losses to RON 2.54mn

Description The company has recorded a net loss of RON 2.54mn in the first 9 months of the year, a 4 times drop as compared to the RON 10.46mn scored in the same period of 2009. Sales reached RON 34.39, 13% down from RON 39.39mn in January-September 2009.

Impact Low.

Title CEZ plans to invest about RON 200mn in 2011

Description The company has an investment budget of RON 200mn for next year to finance upgrade of the electricity distribution grid, mainly the high voltage. The investment will increase the quality of services by reducing power blackouts. CEZ has upgraded about a quarter of the power grid and about a third of the power stations.

Impact Low.

Renewables

Title EDP to complete two wind farms in November

[4] *Group Ecoterm is majority owned by Slovak company, Menert Spool (51%) and Resita municipality (49%).*

Description The company will complete in November the construction of two wind farms developed in Dobrogea with a total installed capacity of 228MW.[5] Total investment is some €300mn. The company was granted authorisation to build two further wind farms, 24MW in Vutcani, Vaslui county and 33MW in Sarichioi, Tulcea county.

Impact High. This is the second biggest wind farm in term of installed capacity, after the CEZ project.

Gas sector

The government is likely to end supply of domestic natural gas for chemical industry producers and some companies in the energy field. The companies will have to acquire imported gas which will increase their costs. Most of chemical fertilizer producers are likely to go bankrupt and this will decrease industrial electricity consumption.

[5] *The two wind farms are located in Pestera and Cernavoda.*

6. APPENDIX

Table 2: Fuel oil and coal to be allocated to local DHs from state reserve		
Company	**Coal**	**Fuel oil**
Termoelectrica	0	30,000
ELCEN Bucuresti	0	50,000
Electrocentrale Galati	0	15,500
Electrocentrale Deva	0	1,000
Nuclear company	377,000	10,430
EC Craiova	300,000	4,500
EC Turceni	150,000	0
EC Rovinari	0	1,000
CHP Arad	100,000	0
CHP Arad (gas/oil fuelled)	0	5,000
CHP Bacau	250,000	5,619
CHP Brasov	150,000	0
Uzina Termoelectrica Galati	0	5,000
CHP Govora	200,000	3,000
CHP Iasi	0	12,825
Electrocentrale Oradea	60,000	5,000
DALKIA Termo Prahova	0	14,000
Termica Suceava	0	4,000
Colterm Timisoara	100,000	4,000
Terma Serv Alexandria	0	2,000
Modern Calor	0	6,000
Total	**1,687,000**	**178,873**

Source: Government decision

Table 3: Funds allocated to CHPs to pay debts towards lignite company SNLO Tg. Jiu and railway company			
Company	**Total RON mn**	**Lignite company SNLO Tg. Jiu**	**Railway company**
Colterm Timisoara	11.50	11.50	0
CHP Brasov	11.51	11.51	0
Electrocentrale Oradea	30.00	30.00	0
CHP Iasi	1.00	0	1.00
CHP Bacau	18.15	5.80	12.35
CHP Govora	41.06	41.06	0
CHP Arad	48.03	44.50	3.53
CHP Motru	4.00	4.00	0
Total	**165.35**	**148.37**	**16.98**

Source: Government decision