

EN

EN

EN



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 11.3.2009
COM(2009) 115 final

**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE
EUROPEAN PARLIAMENT**

Report on progress in creating the internal gas and electricity market

{SEC(2009) 287}

COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT

Report on progress in creating the internal gas and electricity market

A. CONTEXT

The liberalisation of the EU's electricity and gas markets, which began several years ago, has contributed to the rejuvenation of the energy sector. It has helped to develop entrepreneurial potential in this sector, with beneficial effects on a variety of energy-related activities ranging from the production of diverse forms of renewable energy to the creation of financial markets for energy derivatives. Market participants are now better prepared to adapt to the rapid economic and environmental changes – particularly in dealing with the specific challenges that climate change poses to the energy sector. The present reports bears witness to the fact that, over the past five years, significant improvements have taken place in the EU electricity and gas market.

While these developments are encouraging and underline the benefits of the liberalisation process, the full potential of liberalisation has not yet been realised. There are still a number of areas and Member States where the existing legislation (second internal market package) has not yet been properly implemented or where the need for new legislation has become apparent. The Commission is taking action to ensure the correct implementation of EU legislation at national level through the application of infringement procedures and complementing the internal market legislation with the third internal energy market package¹. In June and July 2008, the package passed its first reading in the European Parliament; in October 2008, a political agreement was reached in the Council. The second reading started in January 2009, and is on course to be adopted by mid-2009. Thereafter, the third internal market package will need to be implemented in national law.

One of the purposes of the present report, therefore, is to identify the shortcomings of the current situation and to indicate the areas in which further action is needed. Basically, the input for this report comes in two forms: national reports submitted by national regulators and Eurostat data on end prices. The national reports were submitted to the Commission in the second half of 2008 and they mainly cover 2007; Eurostat data were available for the first half of 2008.

B. DEVELOPMENTS IN KEY AREAS, DEFICIENCIES STILL TO BE ADDRESSED

1. Implementation of legislation

More than four years after the deadline (1 July 2004), implementation of the second Electricity and Gas Directives² is still not entirely complete.

Several Member States, including DK, LU and NL, have now correctly implemented both Directives through appropriate national legislation. There has also been progress in other

¹ See the website of the European Commission at www.ec.europa.eu/energy.

² Directive 2003/54 and Directive 2003/55.

Member States: CZ, FI, DE, GR, LV, LT, SI and UK brought their national laws into line with EU legislation after a reasoned opinion was issued by the European Commission. In the case of some other Member States, the Commission has had to take legal steps to ensure the full and correct implementation of certain provisions. The European Commission continuously scrutinises national laws. Monitoring of compliance with the Electricity³ and Gas Regulation⁴ by the European Regulators' Group for Electricity and Gas (EREG) indicates that full compliance has not yet been achieved, in particular concerning the powers of National Regulatory Authorities (NRAs) to impose penalties and on transparency and related issues.

For gas, publication of the relevant entry and exit points, contracted and available capacities, and historical flows was found to be unsatisfactory in a number of Member States. The Commission will follow up the correct implementation of these existing requirements and, moreover, considers that current requirements need to be further strengthened in order to provide market players with sufficient information. Another area in which further action is needed is balancing rules which still vary widely within the EU⁵.

Compliance with the Electricity Regulation and the congestion management guidelines is improving. Intraday allocation mechanisms have been put in place in about half of the interconnections; the others need to quickly follow suit. Improvements are necessary in order to ensure the full implementation of all transparency requirements and a common co-ordinated capacity allocation mechanism⁶.

The European Commission will consider initiating infringement proceedings in areas where there is failure to comply with the electricity and gas Directives and Regulations.

2. Market integration

A key prerequisite for an integrated European electricity and gas market is that those markets should be adequately connected, and that those interconnections are efficiently used. The resulting increase in cross-border trade will help moderate market power and, as markets become more competitive, consumers will benefit from competitive prices and services.

The magnitude of congestion rents⁷ on the electricity markets suggests that investment in cross-border capacity needs to be increased in order to achieve full market integration. It is an encouraging sign that there is a clear trend towards increased volumes being traded on the power exchange spot market⁸, even if traded volumes still account for only a modest share of

³ [Compliance with Electricity Regulation 1228/2003 – An EREG Monitoring Report](#), ref. E07-EFG-23-06, 18 July 2007; Regulation 1228/2003 Compliance Monitoring. Second Report, ref. E08-ENM-03-05, 4 September 2008, see www.energy-regulators.eu.

⁴ Compliance with transparency requirement of Gas Regulation 1775/2005 – An EREG Monitoring Report, Ref. E07-TRA-02-03, 18 July 2007; Additional Transparency Requirements. An EREG Monitoring Report, ref. E07-TRA-02-03b, 9 October 2007.

⁵ Implementation of Guidelines of Good Practice for Gas Balancing – 2008 EREG Monitoring Report, December 2008.

⁶ Resp. chapter 5 and chapter 3 of the congestion management guidelines

⁷ ETSO-members reported that congestion rents totalled some €1.7 bn in 2007 in comparison with regulated network revenues of €10-11bn for EU/EEA countries.

⁸ It is difficult to make an assessment of the development of the volume traded on the OTC-market, since data are not easily available and verifiable.

total electricity consumption⁹. Another pattern that is becoming visible is the growing activity of traders on power exchanges.

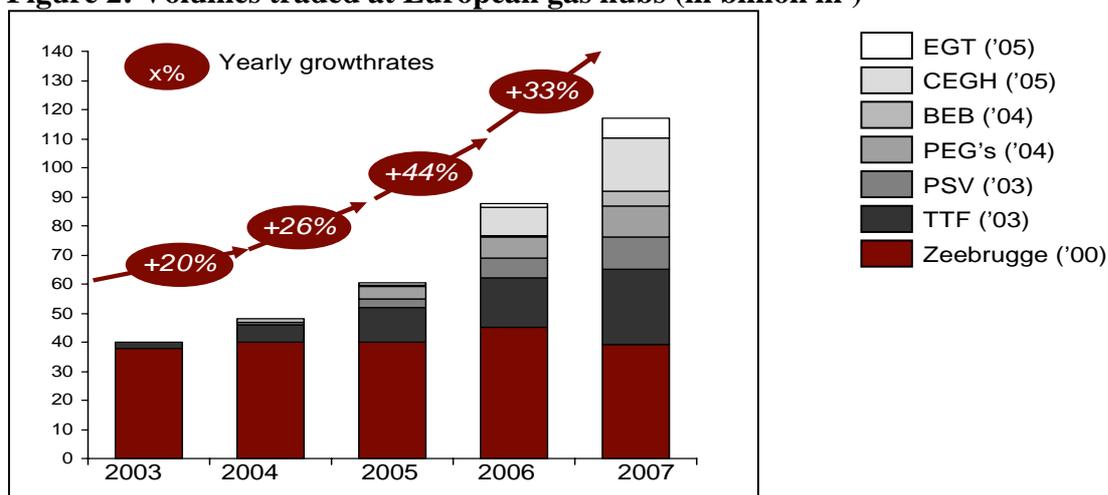
Table 1: Volumes traded at spot market power exchanges

	Volume % of consumption			Number of traders active at PX		
	2006	2007	Δ	2006	2007	Δ
Greece	102,75	105,70	2,88	24	27	3
Denmark	96,09	99,16	3,20	NA	9	NAP
Sweden	70,22	85,32	21,52	NA	150	NAP
Spain	51,90	80,06	54,25	22	25	3
Italy	58,22	65,11	11,83	80	89	9
Finland	42,00	45,85	9,16	NAP	NAP	NAP
Portugal	0,00	43,63	NAP	NA	2	NAP
Lithuania	18,88	21,98	16,43	5	5	0
Germany	15,60	21,48	37,68	161	192	31
The Netherlands	17,14	18,48	7,81	NA	NA	NAP
Romania	7,74	9,32	20,31	NA	99	NAP
France	6,19	9,20	48,73	74	68	-6
Belgium	0,59	8,43	1325,26	NA	24	NAP
UK	4,33	4,71	8,97	51	60	9
Austria	2,70	3,73	38,19	37	40	3
Poland	1,11	1,60	43,10	NA	NA	NAP
Slovenia	0,01	0,01	97,45	14	15	1

Source: Regulators' data

The volumes traded at the gas hubs rose by 33% in 2007. This is another important increase after the 44% increase in 2006. For the time being, the physical volumes delivered at most of the hubs are still relatively low compared to the total consumption in their markets.

Figure 2: Volumes traded at European gas hubs (in billion m³)



Source: AT Kearney

⁹ The differences in the spot trade volumes as percentage of national electricity consumption do not as such give an indication of liquidity of the wholesale markets concerned; however, the pattern of increased volumes is clear. See Sector Inquiry, p. 128-129.

Several projects are seeking to boost market integration by providing new infrastructure. One such example was the agreement reached to build a new interconnection on the French-Spanish border. Some major new infrastructure projects have received exemptions from regulated third party access under Article 22 of the Gas Directive¹⁰ or Article 7 of the Electricity Regulation¹¹.

Regional initiatives

Regional initiatives in the electricity sector have resulted in some concrete progress: joint capacity allocation on the Italian-Slovenian and Italian-Swiss border; the intraday continuous trading platform on the Germany – Denmark-West interconnector; a cross-border balancing system on the French-English interconnector; the implementation of day-ahead market coupling on the German-Danish interconnections; and the publication of more detailed information on load, transmission and balancing (in the Northern region and the Central and Eastern Europe region). Each of these developments is a step forward. In order to continue improving (regional) market integration, the creation of a single auction platform and market coupling¹² should be envisaged. The progress made on a common auction office in the Central and Eastern Europe region and a capacity allocation office (CASC) in the Central West region should serve as an example to be followed by other regions.

In the gas regional initiatives progress was made on the following issues: a day-ahead gas price index was established for the Central European Gas Hub (CEGH); concrete plans were developed to increase interconnection at the French and Spanish border; the work in the North West region focused on balancing, gas quality, hubs and transparency. Further market integration would require more focus on capacity allocation, the offering of services that facilitate efficient gas trade and guaranteeing that network tariffs (cost-plus or market based) provide incentives for cross-border investments, in particular. Equally important is the implementation of non-discriminatory and transparent balancing rules that are aligned across the national borders.

3. Concentration and consolidation

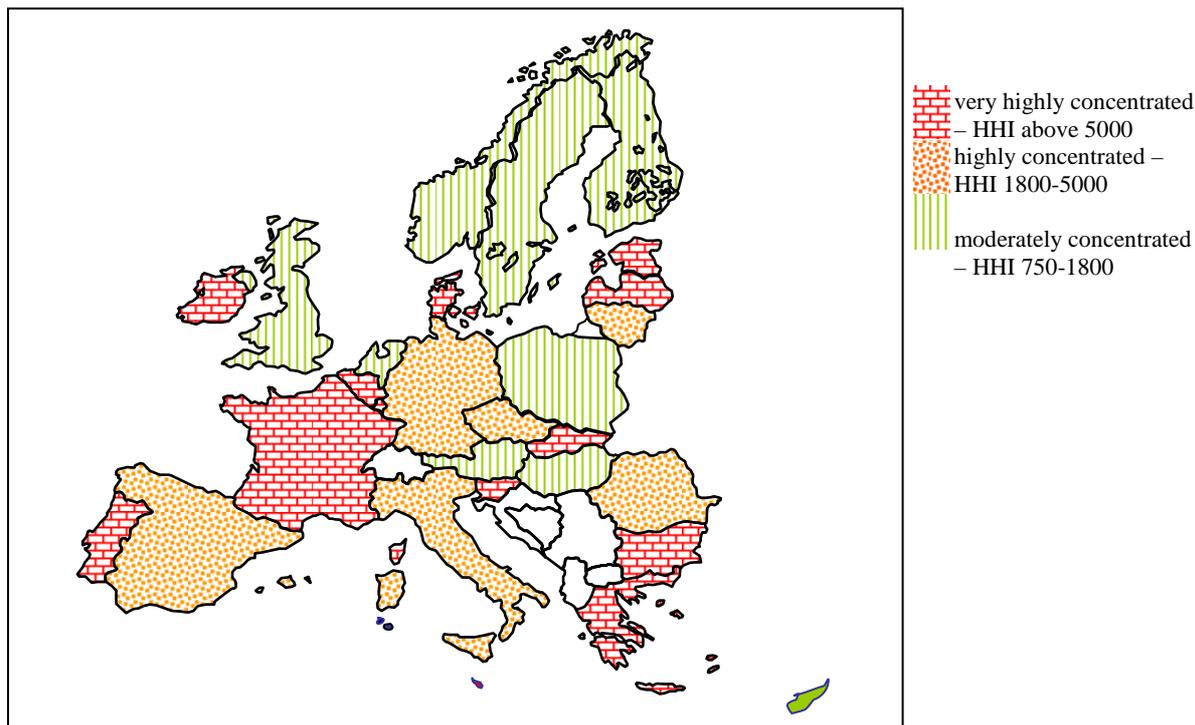
On the electricity wholesale market, the three biggest generators still control more than 70% of generation capacity in 15 Member States. The high level of concentration on the electricity wholesale market is confirmed by the fact that there was a moderately concentrated market in only eight Member States.

¹⁰ 2 projects for LNG-terminals: GATE and Liongas in the Netherlands and the extension of the Grain LNG terminal in the UK; 2 projects for gas pipeline projects: IGI Poseidon pipeline between Greece and Italy and the Austrian section of the Nabucco pipeline.

¹¹ The BritNed interconnector between the Netherlands and GB; Estlink between Finland and Estonia and the East-West interconnector between Ireland and Britain.

¹² Market coupling is a way to allocate cross border capacity through implicit auctions, using bids in neighbouring power exchanges.

Figure 3: Market concentration of electricity wholesale market (by HHI)

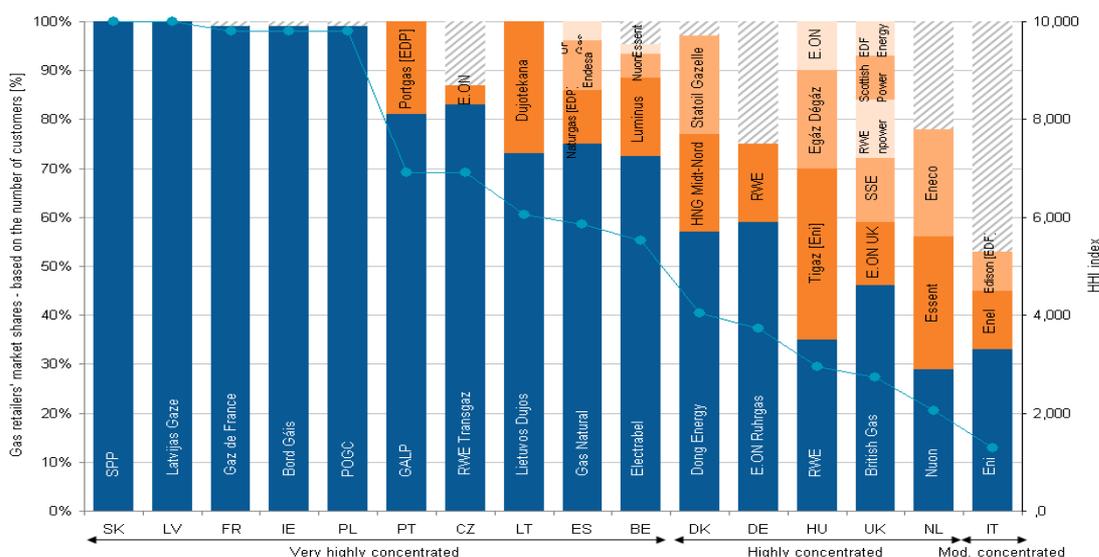


Source: Regulator's data

In the gas wholesale market, the concentration is even greater. The three largest wholesalers have a market share of 90% or more in 12 Member States.

Further improvements are needed too, in order to have a properly functioning retail market. As far as the electricity retail market is concerned, the market share of the three largest companies in the whole retail market was over 80% in 14 Member States. The HHI shown in the figure below indicates the level of concentration on the gas retail market. In only one Member State, the market is moderately concentrated.

Figure 4: Concentration on gas retail market

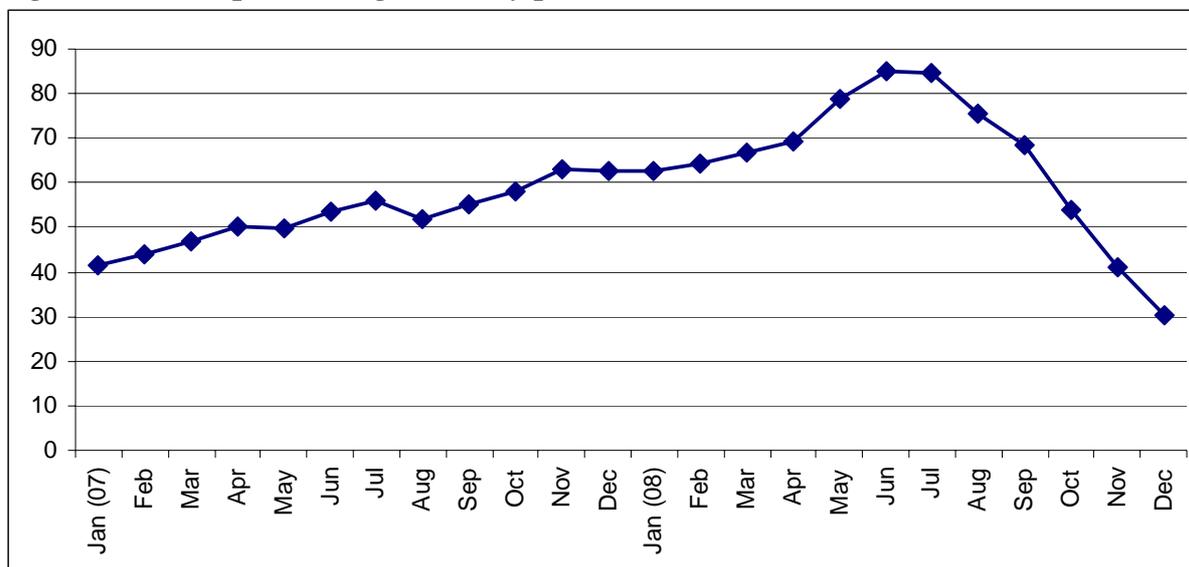


Source: Capgemini

4. Price trends

Electricity and gas prices have been strongly influenced by rising oil prices on the international market. In the first half of 2008, the Brent average monthly price increased by 36 %¹³. Between July and December 2008, the Brent average monthly price decreased by 64 %, given the worldwide economic crisis and declining oil demand.

Figure 5: Brent spot: average monthly price (in €)



Source: Platts

Movements of the oil price on the international market influence gas and electricity prices due to the oil price acting as a reference price in long-term gas supply agreements. This link is likely to become weaker with a better functioning gas market, a more diversified gas supply portfolio and more favourable import conditions. Price review clauses calculate price differences after a given period (typically 3 to 6 months); the decreasing trend of oil prices should lead in turn to lower gas and electricity prices in 2009.

Electricity prices for household consumers in the first half of 2008 differed quite considerably, which is a sign of insufficient market integration. Various factors explain the differences in electricity prices between Member States. First, there are the differing costs of generating electricity (in particular the fuel mix). The second element is the availability of sufficient generation capacity. Thirdly, there is the important role played by the level of competition on the wholesale and retail market. Finally, regulated prices also lead to price differences between Member States.

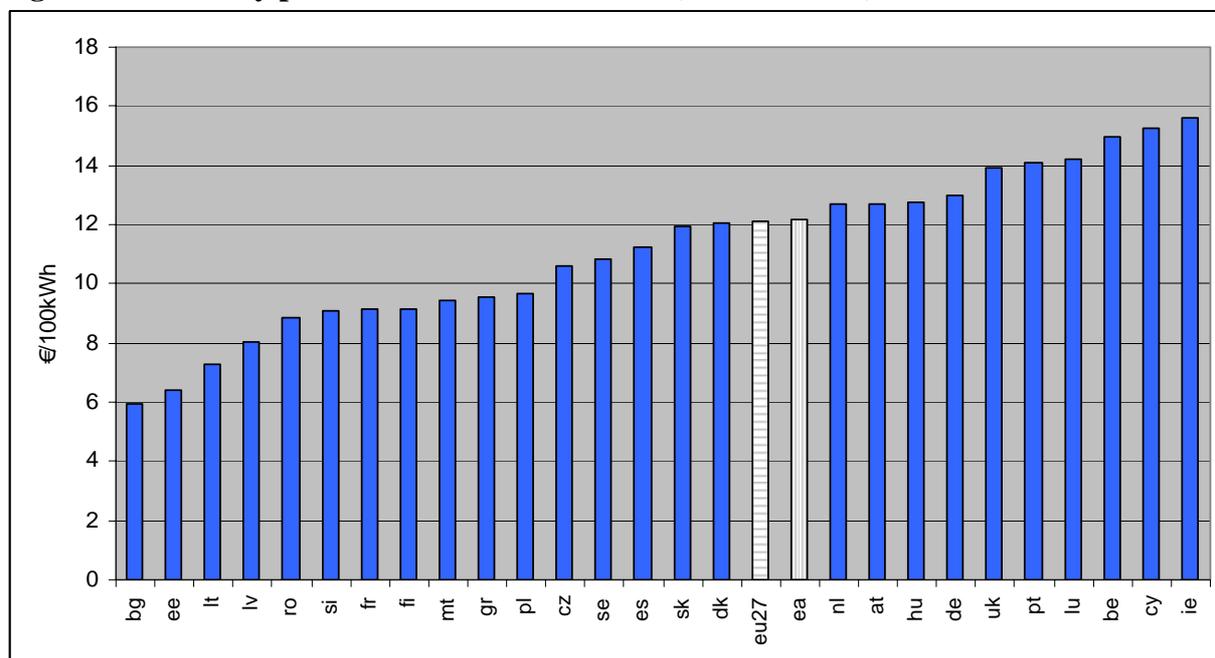
In the reporting period, the increase in electricity prices varied widely amongst Member States. On average, household electricity prices rose by almost 2%¹⁴. Household electricity prices in particular rose in HU, CZ, DK, BE, LV and CY, i.e. an increase of more than 13% in that period. There is not necessarily a link between the big increases and the highest electricity prices in absolute terms, except for CY and BE. IE has the highest electricity prices in absolute terms (without tax), despite the fact that prices fell by almost 8%. Figure 6 shows

¹³ Monthly average Brent in € comparison January-July 2008.

¹⁴ Analysis based on Eurostat figures in Euro, without taxes. DC and DD consumption – see table 5.7 in the Technical Annex. Comparison of the second semester 2007 versus the first semester 2008.

that the five Member States with the lowest household electricity prices all have regulated prices.¹⁵ Therefore, it seems as if the differing levels of increase may be due in part to specific policy measures (such as regulated prices); it also seems that those Member States in which the supply-demand balance deteriorated experienced larger increases.

Figure 6: electricity prices household consumers (without taxes)¹⁶



Source: Eurostat

When purchasing power parities (PPP)¹⁷ are taken into account, electricity prices are high for households in HU, SK, DE, CY, DK and PL (all taxes included). All of these Member States, except for DE, happen to have regulated prices. Electricity prices are lower for households in FI, FR, NO, EE, EL and LV.

Gas prices for households rose by more than electricity prices (without taxes): around 5% to 7% in the first half of 2008. Here, too, the picture is influenced by regulated prices. In RO, IE and to a lesser extent in PT, household gas consumers benefited from a fall in (regulated) gas prices. Similarly, the seven lowest gas prices are all regulated (RO, EE, LT, BG, LV, HU and PL).

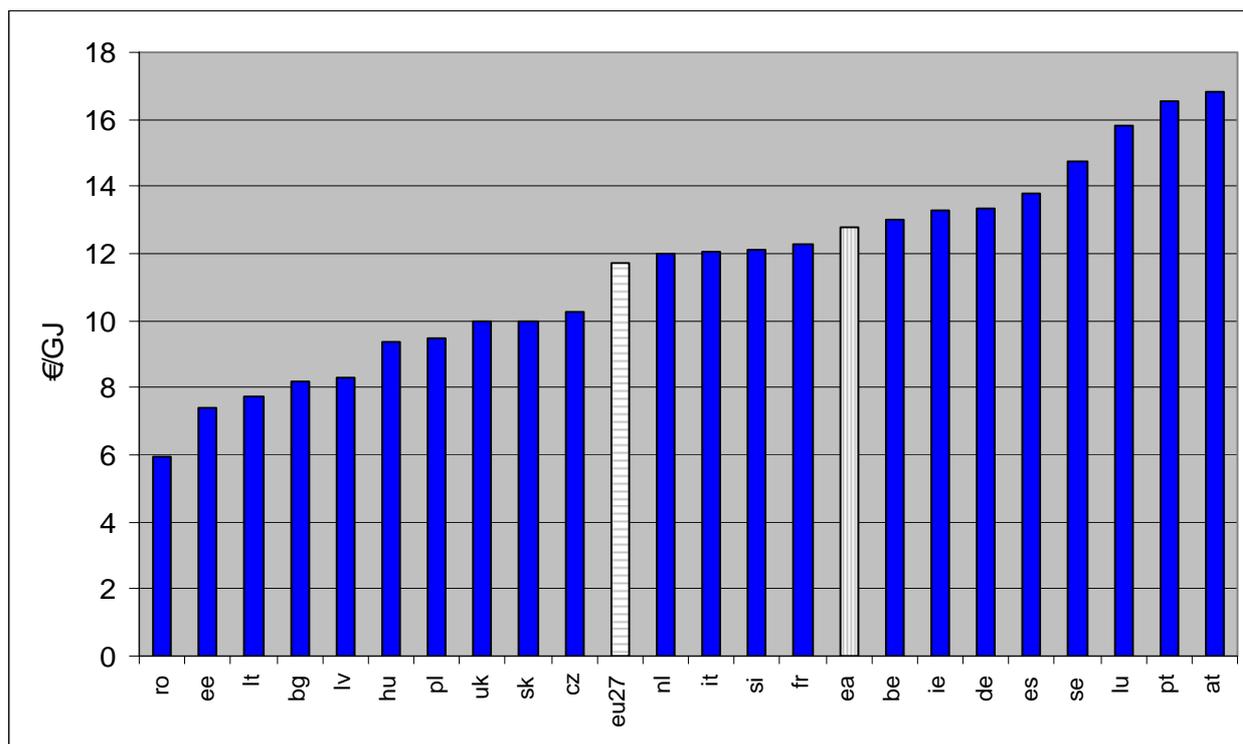
The UK has the lowest (non-regulated) gas price for household consumers. In NL, too, gas prices are relatively low. Both of these Member States are major producers of indigenous gas.

¹⁵ The effects of regulated prices are assessed further below.

¹⁶ Eurostat category DC: consumption between 2500 kWh and 5000 kWh.

¹⁷ The purchasing power parity (PPP) uses the long-term equilibrium exchange rate of currencies to equalize their purchasing power. This allows comparing differences in living standards of different member states because PPP takes into account the relative cost of living and the inflation rates. See table 5.2 in the Technical Annex.

Figure 7: Gas prices to household consumers (without taxes)¹⁸



Source: Eurostat

In terms of PPP, the highest prices to household gas consumers were in SE, BG, AT, PT and SI; gas prices were lowest in UK, HU, LV, IE, FR and EE.

In NL and SE, where prices are not regulated, price increases to household consumers (gas and electricity, without taxes) were below the EU-average. The large percentage of customers switching suppliers in NL suggests that genuine competition in the retail market does help to prevent large price increases. The same holds true for household electricity prices in the UK; although UK gas prices for household consumers have been increasing, UK household gas prices are still the lowest in terms of PPP. An important fact is that indexation of long-term contracts for gas supply in the UK is influenced much more by changes in the gas hub price than is the case in continental Europe¹⁹.

The increase (of between 5% and 13%) in industrial gas prices in the first half of 2008 (excluding taxes) compared to the second half of 2007 was generally greater than the increase in industrial electricity prices. The overall tendency is for the biggest industrial consumers to experience the most significant increases²⁰. Gas industrial consumers were also confronted by large increases in SE, SK, LU, DE, BE, CZ, HU, LT and EE. Here, too, the differences between Member States point to insufficient competition on the (wholesale) market and lack of market integration.

¹⁸ Eurostat category D2: consumption between 20 GJ and 200 GJ.

¹⁹ See Sector Inquiry, p. 105 ff.

²⁰ Cfr. average EU price increases experienced for gas, in different Eurostat categories: I1: + 7%; I2: + 9.74%; I3: + 11.79% and I4: + 15.38%.

As far as electricity prices for industrial consumers are concerned, the most notable increases were in AT, BE, CZ, HU, SK, LV and PT. However, these large increases are not necessarily linked to the high level of electricity prices: in the first half of 2008, the highest electricity prices for industrial consumers were in CY, IE, MT and SK²¹.

5. Independence of network operators

During the reporting period, some progress was made on the unbundling of network operators. At the distribution level, functional unbundling became compulsory in all Member States as of 1 July 2007. In many cases, however, distribution system operators (DSOs) have so far been slow to implement functional unbundling effectively. This applies to both electricity and gas DSOs. Moreover, Member States continue to make extensive use of derogations from unbundling at distribution level: more than half of the Member States allow DSOs with fewer than 100 000 customers to be exempted from legal unbundling requirements, both for electricity and for gas.

At transmission level, some Member States have gone beyond the present requirements of legal and functional unbundling. Ownership unbundling is implemented in 15 electricity TSOs and 12 gas TSOs.

6. Effective regulation by regulators

In the reporting period the work of the Florence regulatory forum (for electricity) and the Madrid regulatory forum (for gas) focused on progress with regional initiatives and compliance with the Gas and Electricity Regulation. The continuing efforts of ERGEG and the involvement of a range of stakeholders in the regional initiatives and the Florence and Madrid Forum have not resulted in the development of common standards and approaches for cross-border trade. For that reason, the European Commission's proposals under the new third internal market package include the establishment of an Agency for the Cooperation of Energy Regulators. The Agency's main proposed tasks are intended to complement at European level the regulatory tasks performed by national regulators. Given the outstanding concerns as to the independence of the regulators in some Member States, and given that strong regulators are necessary for a properly functioning market, the Commission's proposals also aim to strengthen the powers of the regulatory authorities.

In order for market integration to take place, there also needs to be effective cooperation among TSOs. The Commission will therefore formally designate the European Networks of gas and electricity transmission system operators (ENTSOG and ENTSOE) as having responsibility for harmonising network access rules and operational rules, exchanging information between TSOs and coordinating new investments.

7. Customer dimension

To help inform consumers of their rights, the Commission organised an EU-wide information campaign on citizens' consumer rights and developed a European Energy Consumer Checklist of 'frequently asked questions' by consumers about their own retail energy markets, in their own language. In addition, the Commission launched the Citizens' Energy Forum²² to help

²¹ See figure 5.3 of the Technical Annex.

²² The first meeting of the "London Forum" was organised on 27 and 28 October 2008. See website of DG TREN www.ec.europa.eu/energy/gas_electricity/forum_citizen_energy_en.htm.

consumers by working to enforce their existing EU-wide rights and to provide them with clear, straightforward information on what choices are available to them when it comes to buying their gas and electricity. The Forum will develop recommendations aimed at better implementation and enforcement of the rights of energy consumers, and better electricity and gas retail markets; it will also prepare recommendations on billing. The 2008 Eurobarometer illustrates the need for consumers to be provided with further information on the operation of the internal gas and electricity market²³. The Consumer Markets Scoreboard is a new initiative by the Commission; it will also cover electricity and gas, and will include key indicators such as prices, consumer complaints, switching and consumer satisfaction.

Consumer response — switching

Only a small number of Member States have managed to provide overall and comprehensive figures for switching. For electricity, BE and SE reported an annual switching rate of around 10% per eligible meter point of the national retail market for 2007²⁴. The annual switching rate for the medium-sized industry was quite significant in DK and IT (over 20%) and in SI and SE (around 10%). NO, SE, NL and the UK accounted for the highest switching rates for small industry and households. Taking annual switching rates per volume into account, high switching rates were reported for large industrial users in BG, LU, PL, DE and ES.

For gas, there are no consistent figures available on supplier switching. As regards the switching rates for the whole gas retail market, only seven Member States reported figures per eligible meter point; four Member States reported figures per volume. Switching rates (per eligible meter point) for small industry and households are worth mentioning, particularly in NL (8.3%) and in the UK (18.4%). The switching rates for the whole gas retail market (per volume) are high in DK and ES (+ 20%) and slightly less so in HU and DE .

Switching levels vary considerably across Member States, with some mature markets - such as the UK - experiencing relatively high rates and a number of others showing little or no activity. At the level of small industry and households, the reported figures suggest that electricity consumers tend to be more active than gas consumers.

Regulated prices

As acknowledged in the Communication on a single market for 21st century Europe²⁵, the single market must continue to focus on areas that have a bearing on the daily life of consumers, such as energy. This includes the existing EU regulatory safeguards on universal service, public service obligations and also vulnerable consumers.

Coexistence of open energy markets and regulated energy prices is still quite common among EU Member States: more than half of the Member States have regulated prices. The Member States that have regulated prices for electricity and gas are: BG, DK, EE, FR, HU, IE, IT, LV, LT, PL, PT, RO, SK and ES. In GR, CY and MT there are regulated prices for electricity. DE abolished regulated electricity prices in 2007 (households and small businesses). FI has regulated prices for gas. In most Member States price regulation is not confined to household customers.

²³ See Figures 2.6 – 2.8 of the Technical Annex.

²⁴ See table 2.2 of the Technical Annex.

²⁵ A Single Market for 21st century Europe, p 5, COM (2007) 724 final.

The negative effects of regulated energy prices continue to be a major concern in terms of the proper functioning of the internal energy market, because such effects can lead to a distortion of competition (e.g. entry barriers for new suppliers and disincentives to switch supplier) and they do not send the right price signals (influencing investments and incentives for energy efficiency)²⁶. Moreover, price control mechanisms might not be compatible with EU law. The protection of “vulnerable customers” should not be confused with maintaining regulated prices for all (or certain categories of) consumers. Carefully targeted price regulation may be necessary in order to protect individual consumers in certain specific circumstances.

C. SECURITY OF SUPPLY

If the EU is to continue to have a secure energy supply, major investments are needed over the next two decades. This is confirmed in the Commission's Second Strategic Energy Review²⁷ and by the International Energy Agency (IEA)²⁸.

Directive No 2005/89/EC concerning measures to safeguard security of electricity supply and infrastructure investment was due to be transposed into national legislation by the Member States by 24 February 2008. As at the date of this report, 19 Member States have notified complete transposition of the Directive. Certain Member States (HU, SK, PL) have imposed electricity export restrictions based on security of supply arguments. However, EU legislation allows Member States to take temporary safeguard measures only where the physical safety or security of persons, installations or system integrity are threatened.

For gas, the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions, Directive 2004/67/EC of 26 April 2004 concerning measures to safeguard security of natural gas supply is the relevant point of reference²⁹. According to the Communication, the current Community mechanism is not sufficient to ensure a timely response to a gas supply crisis that goes beyond the level with which national measures can cope. Furthermore, any real-time assessment of the gas supply situation and potential responses within the EU is being made very difficult by the lack of transparency.

D. CONCLUSIONS

In 2007 and 2008 a great deal of effort was put into enhancing competition on the wholesale market; significant progress was made through the regional initiatives. There also seems to be a new trend towards building new energy infrastructure. This is crucial to overcoming the longstanding fragmentation of EU energy markets. The trend is set to continue but it may take some time because the planning and building of such infrastructure requires long time-horizons.

This report presents a mixed picture of the progress of completing the internal energy market. While the situation in more mature markets is demonstrating the potential benefits of energy market liberalisation, there are still a number of areas and Member States where significant

²⁶ See also End-user energy price regulation. An ERGEG position paper (ref. E07-CPR-10-03, 18 July 2007).

²⁷ Second Strategic Energy Review. An EU Energy security and solidarity Action Plan COM (2008)781 final, 13 November 2008.

²⁸ World Energy Outlook 2008, IAE, Paris, 2008, p. 89.

²⁹ COM(2008) 769 final, 13 November 2008, available on DG TREN's website.

obstacles to the efficient functioning of the electricity and gas market persist. A major concern is the incomplete implementation of European electricity and gas legislation. The recent experience of rising energy prices underlines the need to make market integration and the enhancement of cross-border trade the top priorities. It is therefore essential that the Electricity and Gas Regulations are properly implemented by all Member States. The Commission urges Member States, regulators and industry to take the appropriate steps as quickly as possible. The 3rd internal market package is meant to complement the existing EU legislation and must not be used as an excuse for the inadequate implementation of the existing 2nd internal market package. The European Commission will consider initiating infringement proceedings for non-compliance with provisions in the gas and electricity Directives and Regulations.

With respect to market concentration, progress has generally been slow. A number of wholesale markets, in particular, still suffer from limited competition and the lack of liquidity.

There are signs that the situation on the retail market is about to improve. Member States should put even more effort into providing comprehensive data for supplier switching.

A major issue in the reporting period was the increase in energy prices, in part due to the rising price of oil on the international market. This triggered major increases in energy end-prices. Industrial consumers in some Member States were faced with more severe price increases than in others. Prices for primary energy sources have fallen significantly since the summer of 2008. Competition and market opening should ensure that these lower prices are passed on to the end consumers.

While short-term solutions, such as regulated prices, might appear to be advantageous in the light of rapidly increasing energy prices, the present report has stressed the likely consequences of such measures: investor confidence is undermined, market entry is deterred and the full benefits of the internal energy market are placed at risk. Over the coming two decades, the EU - like other parts of the world - has to address the need for major investments in infrastructure. In the long term only a properly functioning internal electricity and gas market can send the right price signals to encourage investment.