



# Annual Report 2007

→ **Editorial**

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Tel. +43 (0)1 24 7 24-0; fax +43 (0)1 24 7 24-900; e-mail office@e-control.at

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Dr. Martin Bartenstein  
Federal Minister of Economic  
Affairs and Labour

In 2007 Austria was obliged to tackle a number of energy-related challenges, from high oil and gas prices to climate change, and energy efficiency – an issue that will become still more important in future. We did so without compromising market opening or efforts to meet the targets for the use of renewable energy sources. Increasing energy import dependence and the need for emergency preparedness also keep raising new questions, to which the federal and provincial authorities responsible and the energy sector itself must respond and this often leads to marked differences of opinion.

Two extremely important energy infrastructure projects took shape during the year. Work began on the 380 kV power line in Styria after its approval by the Environmental Senate, and watershed decisions were taken on the Nabucco gas pipeline. The exemptions granted by Energie-Control GmbH (E-Control) for the Austrian section of the pipeline, and the appointment of an EU coordinator for the project by the European Commission marked further progress towards making a reality of this important alternative supply route. This decision by E-Control, taken in close consultation with the regulators in Bulgaria,

Hungary, Romania and Turkey, has established a regulatory regime for the pipeline for a 25-year period, which will make it easier to secure the sum of about €5 billion (bn) needed to finance this large investment.

E-Control played a highly active and influential role in the foundation of the Energy Community Secretariat (ECS), which is now an international organisation. This institution is designed to help create an internal energy market along EU lines in South-Eastern Europe and integrate it with the European Community. Austria succeeded in bringing the secretariat to Vienna, with energetic support from E-Control, thus enhancing the city's status as a home to international organisations and a major centre of the energy sector.

On 19 September 2007 the European Commission unveiled its “Third Energy Package”. The main points of these draft amendments to the electricity and gas directives are more effective unbundling of system operators and the establishment of a “European regulator” – an agency tasked with making further progress towards integration of the European electricity and gas markets.

While the Commission's competition goals deserve our support, care must be taken to avoid undue restrictions on energy companies' freedom of action. Austria therefore opposes the Commission's ownership unbundling proposals in their extreme form, as they would be tantamount to the statutory expropriation of an entire industry. Austria has made great strides

towards liberalisation and has always attempted to create straightforward market conditions. During the subsequent discussions in the Council of the European Union, in which member states will set the tone, an accommodation will have to be found between Austria's national interests and the Commission's very far-reaching goals with regard to unbundling.

I should like to take this opportunity to express my gratitude to the managing director of E-Control, Walter Boltz and his staff for the energy and dedication they have shown

in fulfilling their many regulatory responsibilities, as well as those related to arbitration, the preparation of statistics and collaboration with other European regulators. I should also like to thank them for the close cooperation with the Ministry of Economic Affairs and Labour.



Dr. Martin Bartenstein



Walter Boltz  
Managing Director,  
Energie-Control GmbH

2007 was another exciting and significant year for the Austrian and international energy markets. Energy is set to take its place alongside education, health and pensions as a key issue with major economic, social and environmental implications. These make it all the more vital for impending decision-making processes to point the way forward towards a future of secure energy supplies, in the interests of market participants and consumers.

How best to sum up the events of the past year in more detail? 2007 was marked by escalating energy prices, and Austrian consumers faced both electricity and gas price increases. Despite 9% power and 7% gas price rises since November 2006 (according to surveys by Statistics Austria), Austrian energy consumers continued to make too little use of their freedom to choose their suppliers, foregoing up to €300 million (m) in potential savings as a result. Reviewing 2007, one is forced to conclude that competition once again failed to ignite in Austria, despite significant measures to stimulate it and moves to strengthen consumers' rights. Action on competition included: requiring system operators to accord non-discriminatory treatment to all suppliers with regard to the electronic transmission of system charges billing data; shortening the supplier switching process from eight to six weeks from start to finish; putting an end to questionable practices with regard to adjustments of all-inclusive prices; drawing up a code of conduct for suppliers; and distributing a factsheet to energy consumers throughout the country.

Although some of the steps taken over the past year have already shown their worth, there is still much to be done in 2008. Improvements in energy bills to provide greater transparency are high on the agenda for this year.

However, we still believe that the reasons for the lack of competition lie in the crossholdings between Austrian energy companies, inadequate unbundling and high levels of market concentration. There is a great deal of room for improvement here, and we will therefore continue to campaign hard for consumers to benefit still more from energy-market liberalisation.

There were also major developments at international level. The European Commission presented a third package of legislative proposals designed to strengthen competition and promote market integration, as well as increasing security of supply. Among these are effective unbundling of transmission networks, mandatory cooperation between transmission-system operators, improved regional cooperation, action to protect European interests and stronger consumer rights.

The implementation and impact of these measures will claim much of E-Control's attention, and that of the entire energy sector, in 2008. Other issues that are placing demands on us are climate change, energy efficiency and security of supply.

In short, this new year will bring further exciting challenges! I would not want to miss this chance of thanking E-Control's employees and partners, and the industry for last year's excellent spirit of cooperation. I look forward to a continuation of this constructive climate in 2008.

Walter Boltz



Prof. Walter Barfuss  
Ex-Director-General of the Federal  
Competition Authority and Chairman  
of the E-Control Supervisory Board

This Annual Report 2007 is the seventh from Energie-Control Österreichische Gesellschaft für die Regulierung in der Elektrizitäts- und Erdgaswirtschaft mit beschränkter Haftung, or E-Control for short, and the eighth year in its history is already under way.

Like other sector regulators, E-Control not only plays an important role in the work of the competition authorities (the Federal Competition Authority, the Federal Cartel Prosecutor and the Supreme Cartel Court) in terms of competition oversight and promotion, but also has major responsibilities in relation to security of supply, energy efficiency and European market integration.

All of this not only calls for a great deal of expertise, hard work and good judgment, but also for a sense of proportion and a light hand. The breadth and depth of E-Control's duties (market

monitoring and oversight, statutorily required administrative measures – some involving major financial implications and a heavy responsibility – and activities at EU level, aimed at the creation of a single internal European market) are considerable, and they are often in many respects highly delicate.

E-Control's management and their team once again did a fine job during the year under review. As chairman of the E-Control Supervisory Board – a body that the law was wise to provide for – I have no hesitation in saying that we have not made light of our task, but have often been very "tiresome".

As chairman, I should like – on behalf of the entire Supervisory Board – to thank the management and their team for their good work during the year. And as the former head of the Federal Competition Authority (until 1 July 2007) I must also again stress how grateful I am for the high quality of the long-standing cooperation between E-Control and the Authority.

Prof. Walter Barfuss



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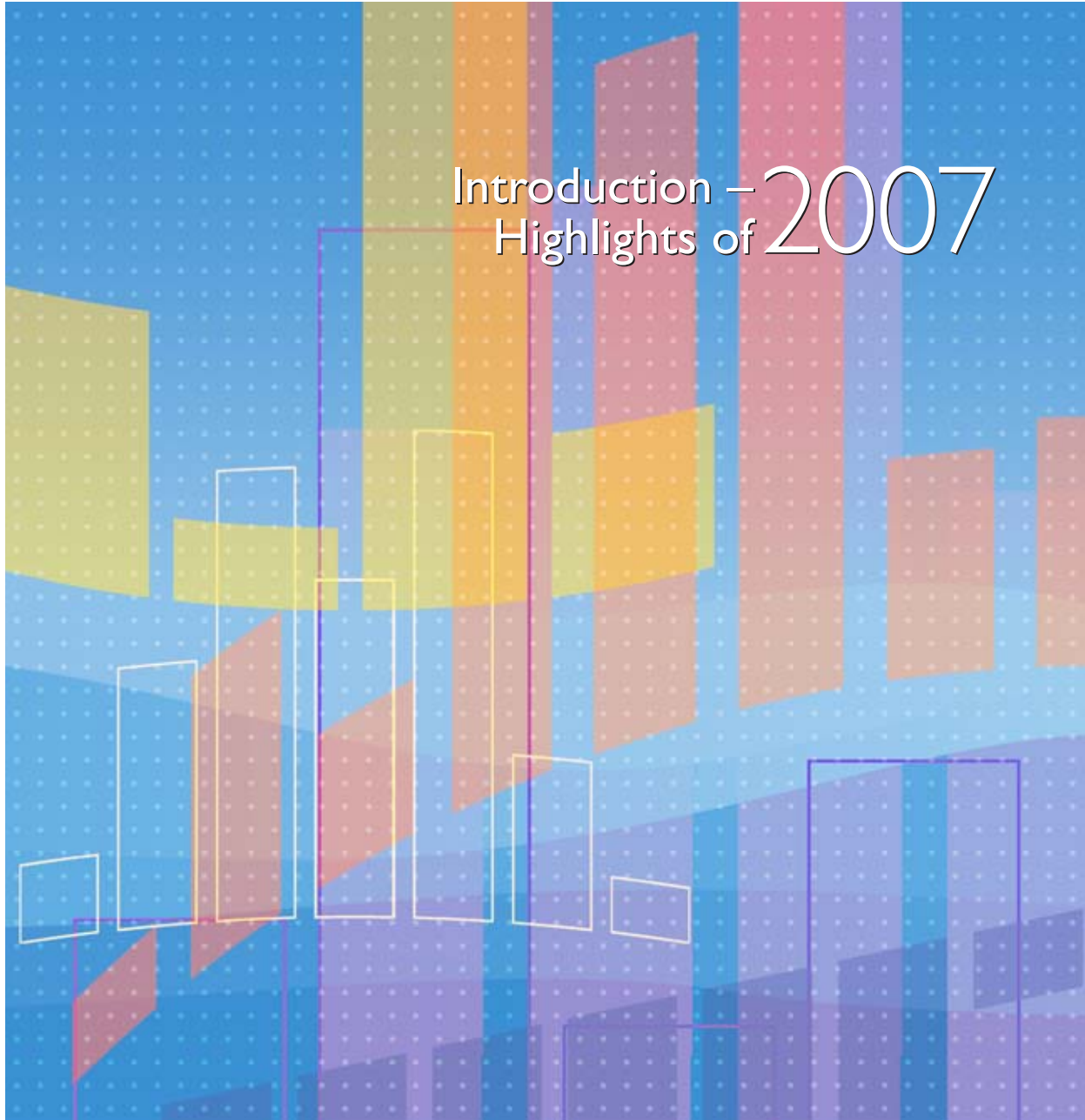
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Introduction –  
Highlights of 2007



2007 will be remembered as a year of climbing energy prices. Oil prices were volatile during the latter months, repeatedly nearing the \$ 100 per barrel mark. The price run-up was triggered by supply uncertainties and political tensions between Iran and the USA. The impact in Europe was considerably softened by the simultaneous devaluation of the US dollar against the euro (euro-dollar exchange rate at year end: 1.4585). Wholesale gas prices tracked oil as a result of the indexation clauses in the long-term contracts. Coal prices also trended sharply upward. The electricity suppliers cited higher fuel costs in justification of retail price increases.

Rising prices on the wholesale markets also pushed up consumers' energy bills. Austrian household energy costs have increased by an average of 7.1% since November 2006, with electricity prices up by 9% and gas prices by 7%, according to surveys by Statistics Austria.

The opening of the Austrian electricity and gas markets to competition in 2001 and 2002, respectively, has given consumers an opportunity of cutting their energy bills by switching suppliers at no additional cost. In 2008 domestic consumers could save about €300 m in this way. Despite higher electricity and gas prices, and greater market transparency from the start of 2007 onwards, few residential consumers are realising these potential savings – a clear indication of continuing competition problems.

### Need for stronger competition

In the electricity market, the investigation of the Austrian electricity industry carried out by the Federal Competition Authority and E-Control in 2005 led to the adoption of a raft of measures designed to enhance competition, and to related independent monitoring. The package includes a number of voluntary commitments by the electricity companies, intended both to bring direct improvements for consumers, and to lead to closer and less expensive cooperation between suppliers and system operators.

Agreement was reached on stimulating competition by: requiring system operators to accord non-discriminatory treatment to all suppliers with regard to the electronic transmission of system charges billing data; shortening the supplier switching process from eight to six weeks from start to finish; putting an end to questionable practices with regard to adjustments to all-inclusive prices; drawing up a code of conduct for suppliers; and distributing a factsheet to energy consumers throughout the country. All these actions were to be implemented in the course of 2007. The Verband der Elektrizitätsunternehmen Österreichs (VEÖ [Association of Austrian Electricity Companies]) was charged by the Federal Competition Authority and E-Control with monitoring the status of implementation and compliance with the competition stimulation package and submitting a report thereon. This report and information gained from E-Control's general market oversight activities

indicate that some of the measures contained in the package have been effective. However, while there has been progress on transparent billing further efforts will certainly be required in this area, and E-Control plans to focus still more closely on these issues in future.

In the gas market, there was a changeover from negotiated to regulated third-party system access for cross-border natural-gas shipments (transits) as required by EU legislation. This should considerably ease access to the wholesale gas markets and consolidate Austria's position as a major gas transit country.

#### Fair competition

E-Control is committed to creating a level playing field for suppliers. The key to this is full compliance with the unbundling requirements through the effective separation of system operation from the wholesale and retail functions. The latest synthesis report by E-Control on gas system operators' compliance reports points to some progress as compared to its predecessor, published in August 2006. Nevertheless, compliance still falls far short of the goals of the Gas Directive. Most of the Austrian electricity companies have merely gone through the motions of unbundling to the extent demanded by the vague and undemanding legal requirements. Independent action of system operators, which offers an assurance of impartiality towards all suppliers, thus remained the exception rather than the rule in 2007. For instance, only one

of the 13 major electricity distribution system operators has assets of its own and largely relies on internal personnel. This means that the integrated companies have not really established fully functioning separate system operators capable of carrying on their business autonomously.

The inadequate unbundling of the integrated companies in staffing and organisational terms, and the scant differentiation between the corporate images of system operators and suppliers share part of the blame for consumers' continued inability to distinguish between the two functions (because of identical branding and company names, and joint corporate communications, among other factors). This creates artificial barriers to switching, which are an important – and for the energy suppliers' owners certainly not unwelcome – cause of low switching rates.

#### Response of the energy sector to climate change

The IPCC Fourth Assessment Report, published in February 2007, touched off an intense debate on climate change. The key issue is how to reduce carbon dioxide emissions, since it is releases of this greenhouse gas that are expected to grow most rapidly. The energy sector can contribute to CO<sub>2</sub> emission reduction by using renewable energy sources and improving energy efficiency. On the demand side, action can be taken to persuade consumers to keep a closer eye on their energy use and upgrade household energy efficiency.

E-Control sees consumer information as one of its key tasks, and this includes energy efficiency. We have therefore developed two energy-efficiency calculators – first the “Quick Check” (in 2006) and then the “Profi-Check” – in cooperation with the Austrian Energy Agency. In addition, we are assessing the prospects for the deployment of smart metering systems to provide consumers with real- or near real-time information on their actual electricity use. The idea behind introducing such systems is to raise consumers’ awareness of the need to use energy efficiently.

#### Security of supply

2007 was marked by widespread concern about security of energy supply, centring on the growing dependence of OECD member countries on a small number of energy producers. Sharp increases in primary energy prices, and cutbacks in Gazprom’s deliveries to successor states of the USSR, leading to minor disruptions of supplies to Western Europe, have caused dismay and focused attention on emergency mechanisms.

In Austria, the Energy Intervention Powers (Amendment) Act 2006 unified and extended the legal framework for emergency responses to electricity and gas supply disruptions. This necessitated the development and testing of new crisis mechanisms and procedures. The Act imposes a number of duties on E-Control with regard to ongoing monitoring of the supply situation (early warning system), and the planning

and preparation of any intervention measures to be taken by the Minister of Economic Affairs and Labour. This includes drawing up standby legislation and overall information and action plans (emergency response manual).

The access to new supply sources and diversification of transport routes that would result from the construction of the planned Nabucco pipeline would also make a significant contribution to security of supply. EU legislation allows exemptions from regulation in order to promote high-risk energy investments. In 2007 E-Control dealt with applications for two such exemptions. Towards the end of the year the E-Control Commission approved the application from Nabucco Gas Pipeline International, thus also opening the way for other transportation infrastructure development projects.

Acquiring new supply sources is crucial to Europe’s long-term gas supply security, as it is increasingly reliant on non-EU reserves and production. Gaining access to gas reserves in the Caspian and the Middle East by developing transportation infrastructure based on the Nabucco pipeline, among other schemes, is thus of great importance. Moreover, an additional pipeline system would of itself increase security of supply. Due to the fact that the transit countries are all EU member states, the entire pipeline would be subject to a uniform legal framework, and it would also be possible to use it as an alternative route for supplies under existing contracts.

### Promoting competition and market integration

Another major talking point of 2007 was the European Commission's Third Energy Package, and the proposals it contains for strengthening and harmonising the regulatory system, and for ownership separation of gas and electricity transmission-system operation from supply and production activities. The final report on the Commission's sector inquiry, published in 2007, found that discrimination by system operators is the common factor behind many of today's remaining market problems. In practice, current European legislation still fails to guarantee new entrants non-discriminatory treatment. This is obstructing progress towards the internal market, preventing many essential investments, putting up consumer prices and endangering security of energy supply throughout Europe. Potential market entrants such as new electricity generators are often deterred by the well-founded fear of discrimination by incumbents. Regional progress towards market integration frequently depends on voluntary concessions by parts of the energy industries. It is patchy and slow, and can be reversed at any time; without legal safeguards it will not be sustainable.

The European liberalisation process has now been under way for over ten years (since the initial negotiations), and at least as regards the wholesale markets it should have been a reality since 1999. The unbundling rules were tightened up in 2003, forcing the formation of some system

operators. This step by the EU was prompted by the recognition that accounting unbundling alone was not enough to prevent discrimination.

Apart from the fact that every delay costs EU consumers a great deal of money as well as unnecessarily burdening the environment, the current uncoordinated approach risks cementing market divisions by obstructing cross-border transportation. This makes it particularly vital to achieve an orderly common approach to the creation of the internal market now.

In its Third Legislative Package the European Commission proposes road maps to market integration and non-discrimination that would strengthen competition and security of supply. It anticipates that these proposals would result in a reduction of 5–8% in consumer prices, as compared to a business-as-usual scenario, and real annual GDP growth of 0.2–0.6%, or €25–70 bn. The impact of the proposals has been tested using internationally recognised economic models, and the results support the Commission's assertions about prices and economic growth.

The central elements of the Third Legislative Package are: effective unbundling of transmission systems, preferably through ownership separation or otherwise through the appointment of independent system operators (ISOs); obligatory cooperation between transmission-system operators; improved regional cooperation; protection of European interests; and stronger consumer rights.

Due to its location in the heart of Europe Austria is particularly exposed to the shortcomings of existing arrangements. E-Control therefore welcomes the Commission's proposals in principle. Failure to expand network capacity due to inadequate unbundling has already meant that additional gas shipments to south-eastern Austria have ceased to be possible. The major gas suppliers in the EU all hold interests in the pipelines in upstream countries. When these companies prevent or delay network expansion this is not only to the detriment of their own customers, but also affects consumers in the transit countries. In the case of electricity the

consequences are not as directly apparent, as power often makes detours on its way to destination countries. However, here, too, failure to upgrade networks and the long-standing inadequacies of coordination between transmission system operators (e.g. in the calculation of network capacity, which suffers from incomplete information exchange due to mutual mistrust) have actually led to cases of decreasing cross-border transmission capacity. These have in turn had direct repercussions on electricity prices, as well as causing unplanned power flows that pose a growing threat to security of supply.



Activities at national level 2007



→ The Austrian electricity market in 2007

Output trends

In the 2006 calendar year domestic electricity consumption as a proportion of total supply rose by 2.6% or 1,691 GWh to 66,915 GWh. It is striking that while there was year-on-year demand growth over the first ten months, at rates ranging between 6.5% (January) and 1.0% (April), there were falls in the last two months of 2006 – by a modest 0.2% in November and a sharp 2.5% in December (Chart 1).

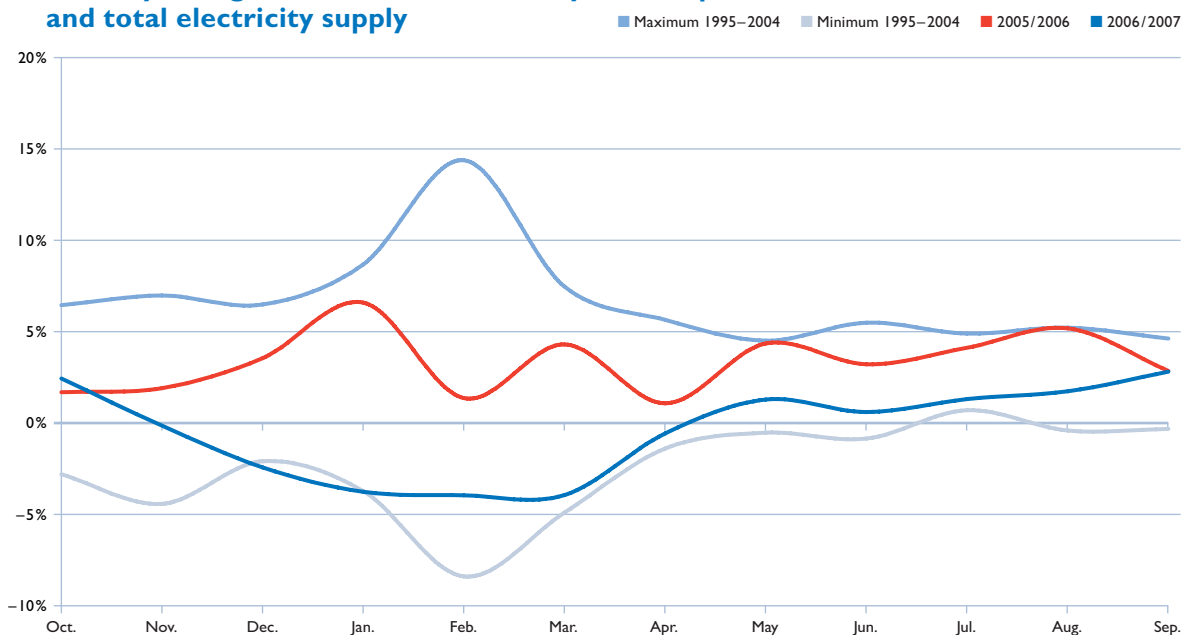
This downward trend persisted throughout the winter months of the 2006/07 gas year and continued until April 2007. In the midwinter period, from December 2006 to February 2007, consumption dropped by a total of 634 GWh, while for the winter half-year as a whole the

decline amounted to 766 GWh. This comparatively marked and very prolonged contraction in consumption is explained by the different weather conditions in the two periods. For several months of the winter of 2005/06 average daytime temperatures were well below the long-term mean, whereas record highs were experienced for almost the entire winter half of 2006/07.

Domestic consumption was down by 378 GWh year on year in the first three quarters of 2007. Consumption of electricity from pumped storage also fell, by 323 GWh, bringing the total decrease in demand to around 700 GWh. During the period under review, hydro power stations generated almost 1,000 GWh and thermal power stations 2,500 GWh less year on year. In contrast, output from other sources saw an increase of 900 GWh compared to the previous period, cutting the overall decline in domestic output to some 2,600 GWh. The shortfall in demand

→ Monthly changes in domestic electricity consumption and total electricity supply

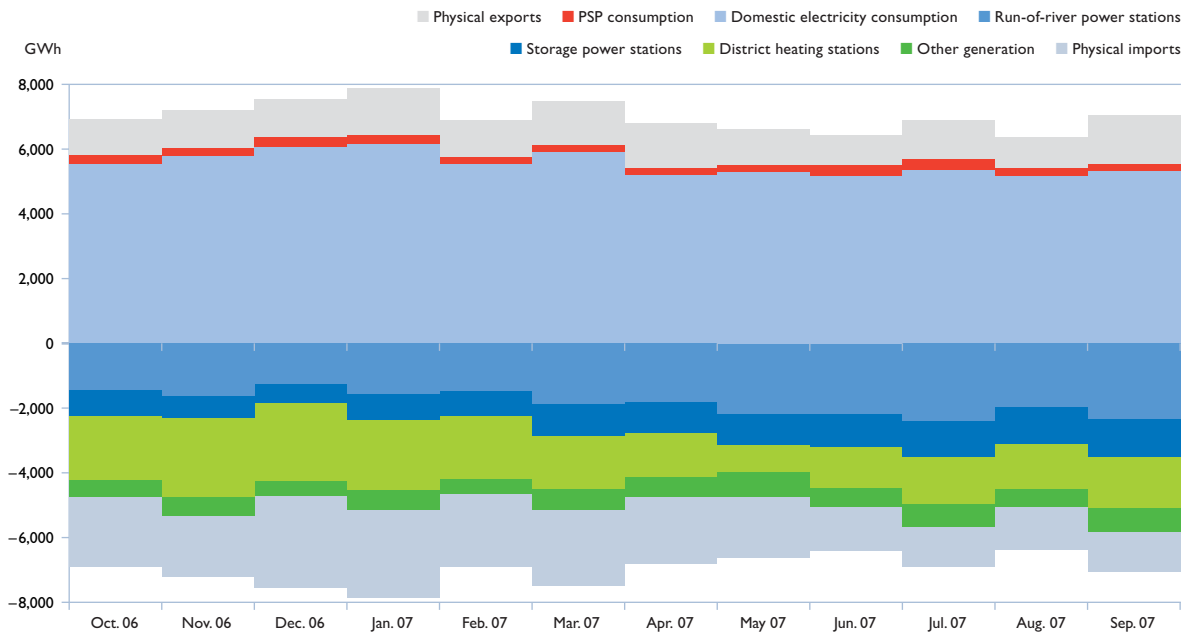
Chart 1



Source: E-Control



## → Electricity consumption and demand coverage as a proportion of total supply Chart 2



coverage due to the drop in output and consumption was balanced by a jump of 1,900 GWh in net physical imports.

As of 30 September 2007, annual storage volume amounted to 2,750 GWh, which corresponds to 86.3 % of storage capacity. This represents a similarly high starting point for the current winter to the previous year. At the same cut-off date, fuel equivalent to some 7,000 GWh of power was in storage at thermal power stations – a year-on-year rise of almost 900 GWh.

### Price trends

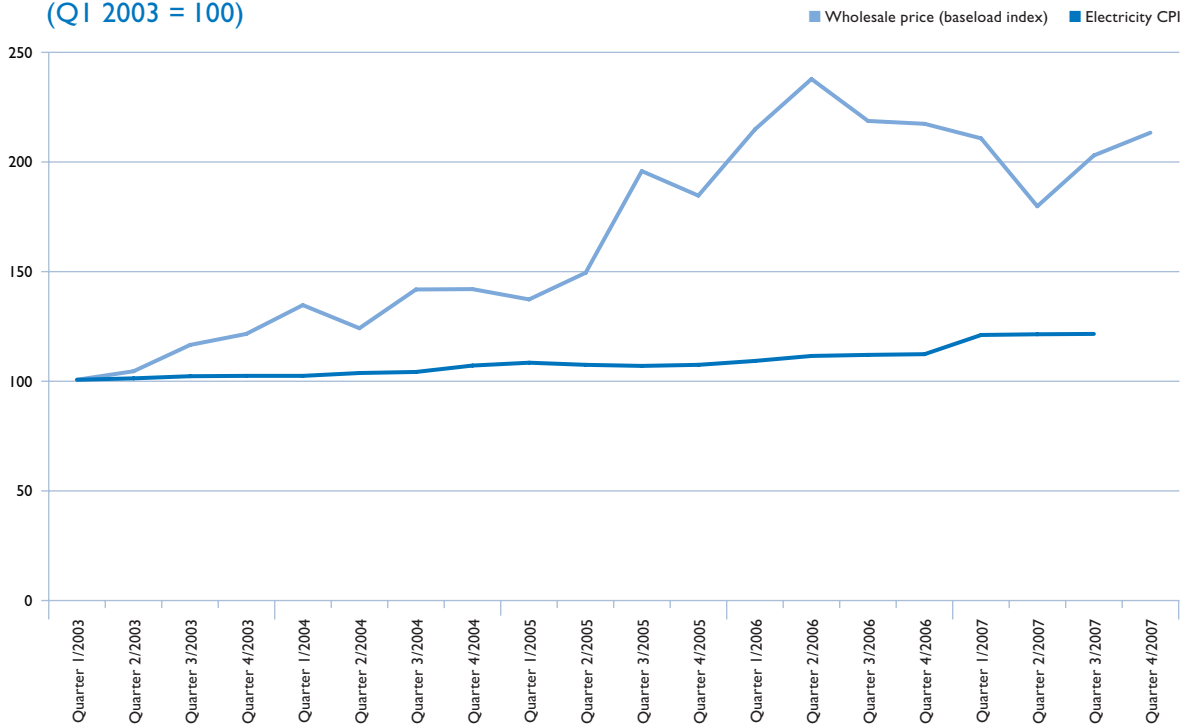
Despite the reductions in system charges in January 2007, the electricity CPI rose again during the year under review. The index covers not only energy prices but also the system charges, taxes and levies paid by final consumers. CHP surcharges and green-power support contribu-

tions were abolished with effect from 1 January 2007 and were replaced by a flat metering-point charge which is payable by all end-users per metering point and year. The size of the charge is determined by the grid level.

Chart 3 shows that wholesale electricity prices have risen far more sharply than domestic rates since the start of 2003. Whereas prices on the power exchanges had doubled over the previous five years, at the start of 2007 consumers were paying only 20 % more than in the first quarter of 2003. This is mainly explained by the make-up of the electricity prices, 45 % of which consists of components not influenced by changes in market prices (i.e. system charges, energy levies and surcharges). Increases in energy prices therefore have only a relatively modest effect on consumers' electricity bills. The steady fall in system charges has cushioned the impact of increased supplier-energy prices over the past few years.

### → Wholesale and household electricity prices, 2003–2007 (Q1 2003 = 100)

Chart 3



Sources: Statistik Austria, E-Control and EEX

Chart 3 also illustrates the time lag of 12–18 months between wholesale price rises and their effect on domestic prices. This is because suppliers meet a portion of their expected consumer demand by concluding forward contracts up to 18 months in advance.

#### Price trends in Europe

Charts 4 and 5 provide a comparison of trends in end-user prices in Europe. To illustrate the distribution, prices were sorted by level and the middle 50% shown. The median shows the exact average price, while the lines above and below illustrate the 25% of prices above and below the median. The line for the first quartile shows that 25% of the prices in the EU are below this level. An additional 25% lie between the lines for

the first and second quartile, and a further 25% between those for the second and third quartiles. The remaining 25% of prices are above the third quartile.

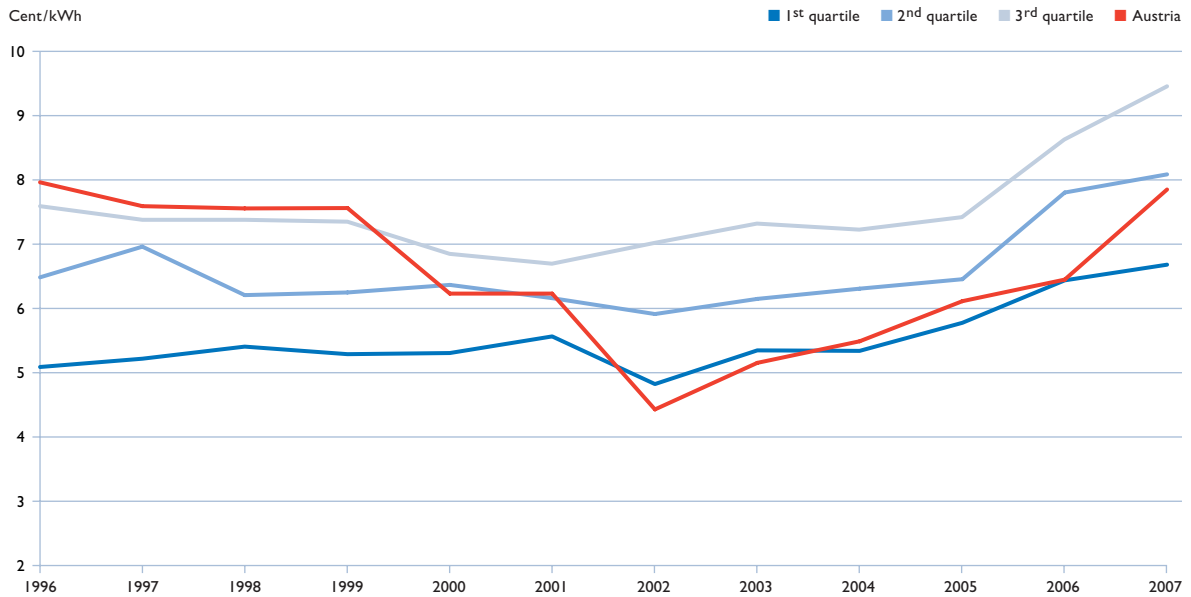
The electricity prices for industrial consumers (with average consumption) in Austria were among the highest in Europe between 1996–1999, and roughly average in 2000–2001. In the aftermath of liberalisation Austrian prices were in the lowest quartile. Since then, however, the situation has worsened, and Austria is only barely among the 50% of countries with the lowest prices.

For domestic consumers with average consumption levels (see Chart 5), prices were close to average between 1996–2004, and have been just inside the lowest quartile since 2004.

→ Industrial electricity prices in Europe<sup>1</sup>

Energy and system charges, 2,000 MWh/year, exclusive of tax and levies

Chart 4

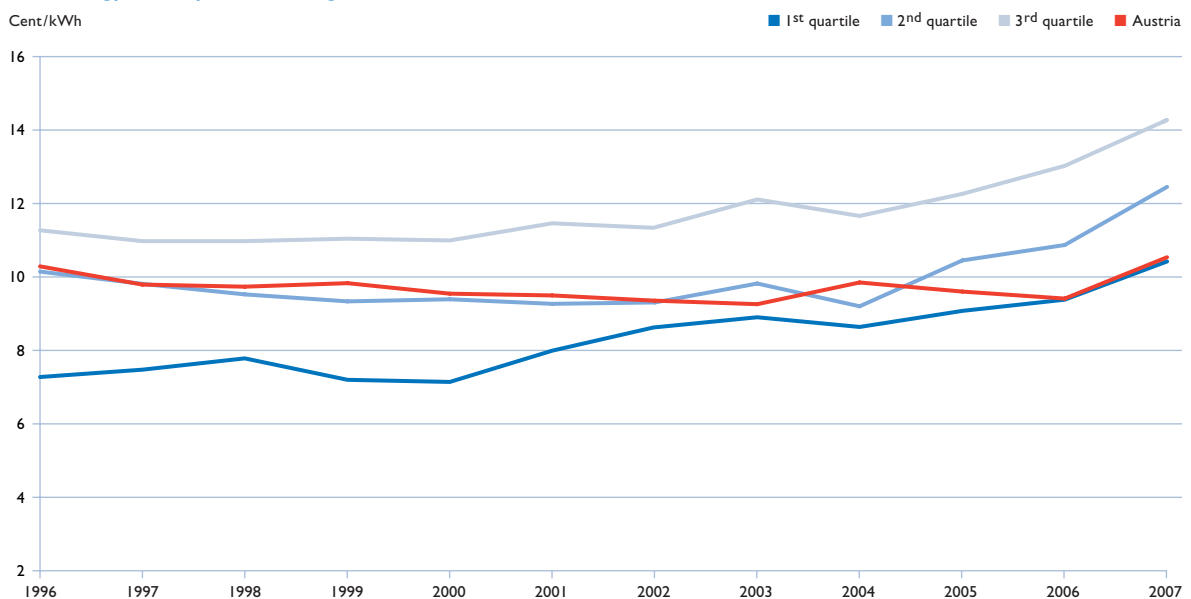


Sources: Eurostat and E-Control calculations

→ Household electricity prices in Europe<sup>2</sup>

Energy and system charges, 3,500 kWh, exclusive of tax and levies

Chart 5



Sources: Eurostat and E-Control calculations

1 Belgium, Denmark, Germany, Finland, France, Greece, Great Britain, Ireland, Italy, Luxembourg, Norway, Austria, Portugal, Sweden, Spain

2 Belgium, Denmark, Germany, Finland, France, Greece, Great Britain, Ireland, Italy, Luxembourg, Netherlands, Norway, Austria, Portugal, Sweden, Spain

**Renewable-electricity trends**

The 2003–2007 period saw a sharp increase in the output of electricity from all renewable technologies (Chart 6). In 2007 wind power and solid biomass are each expected to have provided 2,000 GWh of renewable electricity.

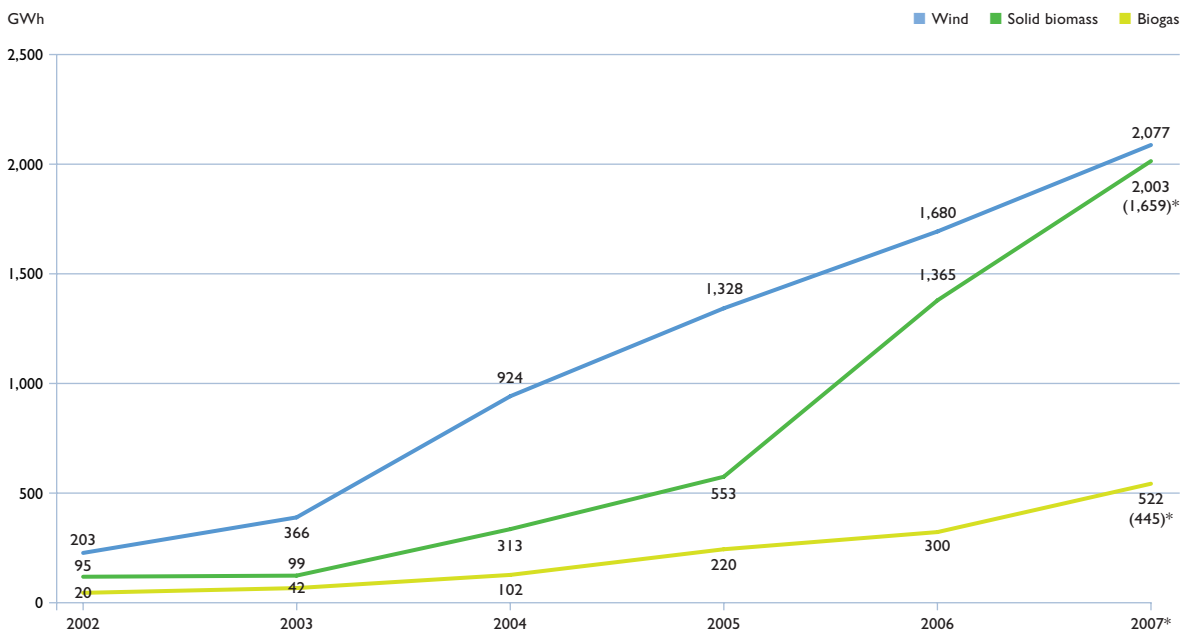
Output of “other” supported renewable energy is forecast at around 4,800 GWh in 2007 and 2008. However, increases in biomass fuel and biogas feedstock prices in 2007 have meant that about one-third of the approved facilities of this type have not been built, so the actual amount of supported renewable energy in 2007 will be below the forecast level.

In the first three quarters of 2007, some 3,102 GWh of “other” renewable electricity and 1,111 GWh of power from supported small hydro stations were injected into the Austrian grid. Support payments, i.e. additional expenses over and above the market price, totalled €187 m during the period, with small hydro accounting for a mere €6 m (all figures exclusive of balancing-power expenses). It should be noted that most small hydro is sold at non-supported rates and is therefore not included in these figures.

Supported renewable energy represented 10.1% of the total power supply from the Austrian public grid in the first three quarters of 2007, of which about three-quarters (7.5%)

→ Supported renewable electricity output by technology, excluding hydro power, 2002–2007

Chart 6



\* The figures in brackets are estimates updated in December 2007  
Sources: OeMAG and E-Control

came from “other” renewable generating stations and the remainder (2.7%) from supported small hydro.

As of the end of the third quarter of 2007, some 1,770 MW of “other” renewable electricity and 393 MW of small hydro power was being subsidised under the renewable-energy support system. Wind power (976 MW), solid biomass (283 MW) and biogas (64 MW) made up the largest proportions of the total.

#### → Electricity market activities

#### Oversight of market participants

*Network regulation:  
electricity tariff determination*

The Systemnutzungstarife-Verordnung (SNT-VO) 2006 Novelle 2008 (System Charges Order 2006 [Amendment] Order 2008) which came into force on 1 January 2008 brought adjustments to the use-of-system and system-loss charges under the incentive regulation scheme introduced by the SNT-VO 2006. This takes account of general industry trends, individual firms’ performance, the evolution of company output, and changes in non-influencable costs by applying a formula based on:

- A 1.95% frontier shift;
- Maximum productivity offsets of 3.5%;
- Revenue weighting of volume growth; and
- The change in the system-operator price index.

The previous year’s approach to the Upper Austria grid zone was retained. The compensation payments were determined by performing a cost audit and a benchmarking analysis of the province’s system operators, which had been excluded from the analysis performed for the SNT-VO 2006. As a result, in Upper Austria the

compensation payments for system operators beyond of a certain size now depend on their individual efficiency scores.

The adjustments to the use-of-system and system-loss charges made by the System Charges Order 2006 (Amendment) Order 2008 were influenced by cost increases due to the following exceptional factors:

- European electricity price trend: rising European electricity prices were reflected in the procurement cost of system-loss replacement power.
- Consumption levy: a constitutional court ruling required the inclusion of the consumption levy in the cost base used to calculate the use-of-system charges, resulting in an increase in the latter.

Rates in the Eastern control area were adjusted as a result of an audit of the costs of the control-area manager, Verbund-APG. Due to movements in transmission network costs the charges paid by distribution system operators for the withdrawal of power from the upstream ultra-high-voltage grid were adjusted. Despite the rising cost of procuring electricity to replace network losses, a decline in losses in volume terms made it possible to reduce the system-loss charges. This improvement was partly due to the installation of three phase-shifting transformers. Higher electricity prices led to an increase in the system services charges.

The redetermination of the use-of-system charges resulted in total cost savings of about €20 m for final consumers, but these were partly offset by a further rise of some €10 m in the system-loss charges. In consequence, the System Charges Order 2006 (Amendment) Order 2008 slightly reduced the nominal total of the two charges (use-of-system and system-loss) for Austria as a whole (Table I).

## → Post-liberalisation tariff adjustments by grid zones

Table I

Tariff adjustment per grid zone	SNT-VO 30 Sep. 2001–1 Jan. 2003		SNT-VO 1 Nov. 2003 / 1 Jan. 2004		SNT-VO 1 Feb.–1 Apr. 2005 / 1 Jun. 2005		SNT-VO 1 Jan. 2006	
	EUR m	in %	EUR m	in %	EUR m	in %	EUR m	in %
Burgenland	-14.6	-15.6%	-3.9	-5.5%	-12.5	-18.9%	-2.4	-4.4%
Carinthia	0.0	0.0%	0.1	0.1%	-15.6	-12.8%	-1.4	-1.3%
Klagenfurt	0.5	2.5%	-1.4	-6.4%	-2.5	-11.5%	-0.4	-2.1%
Lower Austria	-10.8	-4.1%	-14.2	-5.6%	-20.1	-8.1%	-5.6	-2.5%
Upper Austria	-12.4	-5.3%	-9.3	-4.3%	-23.6	-10.7%	-3.9	-2.0%
Linz	-4.2	-5.1%	-2.7	-3.1%	-11.0	-12.6%	-2.4	-3.2%
Salzburg	-40.6	-20.0%	-8.4	-6.0%	-15.1	-10.9%	-5.9	-4.8%
Styria	-39.0	-15.1%	-9.9	-3.4%	-40.4	-14.2%	-10.0	-4.1%
Graz	-6.0	-12.9%	-3.4	-8.0%	-4.8	-12.2%	-1.6	-4.6%
Tyrol	-3.6	-2.4%	-8.1	-5.4%	-11.7	-7.8%	-8.5	-6.2%
Innsbruck	-0.2	-0.6%	-1.3	-4.3%	-2.1	-7.3%	-1.0	-3.9%
Vorarlberg	-1.8	-2.2%	-0.6	-0.8%	-6.9	-9.0%	-1.0	-1.5%
Vienna	-26.9	-7.7%	-16.1	-4.7%	-29.2	-8.9%	-5.0	-1.7%
Kleinwalsertal	0.0	0.0%	0.0	-1.5%	-0.1	-4.9%	0.0	1.1%
<b>Total Austria</b>	<b>-159.6</b>	<b>-8.0%</b>	<b>-79.2</b>	<b>-4.3%</b>	<b>-195.8</b>	<b>-10.8%</b>	<b>-49.1</b>	<b>-3.0%</b>

Tariff adjustment per grid zone	SNT-VO 1 Jan. 2007		SNT-VO 1 Jan. 2008		Total (on basis of volume in 2005)	
	EUR m	in %	EUR m	in %	EUR m	in %
Burgenland	-0.8	-1.6%	-0.5	-0.9%	-32.1	-37.5%
Carinthia	1.4	1.2%	0.3	0.2%	-15.9	-12.4%
Klagenfurt	0.9	4.7%	-0.5	-2.7%	-3.4	-15.1%
Lower Austria	1.9	0.8%	-1.9	-0.8%	-52.8	-18.8%
Upper Austria	-5.0	-2.5%	-2.2	-1.1%	-60.5	-23.6%
Linz	-0.6	-0.8%	-2.3	-3.3%	-24.4	-25.6%
Salzburg	-3.4	-2.9%	-1.2	-1.0%	-60.1	-34.0%
Styria	1.6	0.7%	-1.7	-0.7%	-113.0	-31.9%
Graz	-0.6	-1.9%	-0.7	-2.2%	-18.2	-36.4%
Tyrol	3.3	2.3%	0.0	0.0%	-31.2	-18.0%
Innsbruck	2.1	7.3%	0.0	-0.1%	-2.2	-7.0%
Vorarlberg	2.1	2.8%	-0.1	-0.1%	-8.9	-10.4%
Vienna	-1.2	-0.4%	2.4	0.8%	-82.2	-21.2%
Kleinwalsertal	0.0	-0.7%	0.0	-2.4%	-0.2	-8.1%
<b>Total Austria</b>	<b>1.6</b>	<b>0.1%</b>	<b>-8.5</b>	<b>-0.5%</b>	<b>-505.1</b>	<b>-23,7%</b>

Source: E-Control

*Austrian cross-border electricity trade in 2007*

The methods of allocating capacity at Austria's borders – where bilateral allocation procedures have been in place since 2006 – remained largely unchanged in 2007. A bilateral allocation system for short-term contracts and for the 2008 annual auction was also introduced at the interconnection point with Slovenia in November 2007. This was due to the expiry in July 2007 of the derogation granted to Slovenia under Regulation (EC) No 1228/2003.

A more closely coordinated system for the allocation for cross-border transmission capacity between Italy and its northern neighbours in 2008 was laid down during the year and was launched in December 2007.

During the audits of transmission-system operators' costs E-Control used the allocation proceeds as a reserve for network expansion, combating congestion and reducing national use-of-system charges. The relevant information and the outcomes of the capacity allocation procedures, including the methods employed, are posted on the websites of the TSOs involved and the auctioneers.

*Unbundling compliance*

The unbundling rules established by the Electricity Directive (2003/54/EC) are aimed at promoting effective competition and preventing discriminatory behaviour by system operators. This implies a clear separation of electricity distribution and supply, system operators that are kept at arm's length from the owner's retail operations, and strictly non-discriminatory treatment of all suppliers by the system operator.

## Legal basis

Responsibility for monitoring unbundling compliance in the electricity sector is largely devolved to the provinces. The companies concerned are required to report to the provincial authorities and E-Control. The provincial authorities must submit annual reports to E-Control outlining the action taken by system operators under the latter's compliance programmes.

The oversight of unbundling by the provincial authorities is effectively limited to ensuring that the companies' compliance reports are received on time and forwarding them to E-Control. They have hitherto refrained from investigating the steps taken by the companies or initiating action themselves.

## Experience of legally unbundled system operators gained during tariff reviews

As stated above, oversight of the unbundling of electricity system operators is the responsibility of the provincial authorities. However, during the reviews performed in connection with the re-determination of the system charges E-Control was for the first time able to gain an overview of the effectiveness of the steps taken by companies to comply with the unbundling requirements.

## Resources

There is only one legally unbundled system operator in Austria that owns network assets. The head counts of the new legally unbundled system operators are between ten and 40. Only two integrated companies have transferred all the relevant human resources to their system-operation subsidiaries.

#### Service contracts with related companies

Due to the scant human resources allocated to the network companies there is a multiplicity of service contracts under which they buy in the services required to perform the core operations of a system operator, namely, electricity network operation and maintenance.

Given the sometimes very rudimentary descriptions of the services provided under lump-sum price agreements it would seem highly unlikely that any quotations are obtained from third parties. Moreover, the contracts are such that they would scarcely be concluded with non-group companies.

#### Auditing of unbundled accounts

The integrated companies' cost accounting has undergone a fundamental transformation since the network subsidiaries were set up. The costs are now only broken down by nature of expense in exceptional cases. Most are reported as "other operating expenses" – the largest expense item – with no indication as to whether they concern staff, material or other costs. As a result, much of the cost transparency for the regulator has been lost, as compared to the situation prior to the formation of network companies. E-Control has therefore initiated a transfer pricing investigation in preparation for the cost audit ahead of the second regulation period. This project is aimed at defining system operators' core processes and assigning uniform costs to them. It has been found that the costs for which the system operators have sought recognition have risen sharply as compared to those allocated to the system operation function in integrated companies. These cost increases are to be probed by the transfer pricing project.

#### Oversight of control-area managers

E-Control's oversight of the Austrian control-area managers focuses on monitoring of the allocation of cross-border capacity and congestion management costs. The relevant legislation calls for largely coordinated, regional capacity allocation. The ERGEG Electricity Regional Initiative is working towards the fulfilment of this requirement.

Congestion management costs in the Verbund APG control area are monitored on a quarterly basis, parallel to the tariff reviews. Congestion management by the control-area manager is necessary because the north-south links in the Austrian transmission grid do not have sufficient capacity to handle the electricity flows along them in accordance with the applicable safety standards. In 2007 congestion management by means of reduced generation in Austria was intermittently extended to the interconnectors with the Czech Republic. E-Control's monitoring function was performed by regularly evaluating the steps taken (generation and network management) and the resultant costs. In addition, the regulator is represented at meetings of the Netzsicherheitsbeirat (Network Safety Council), attended by academic experts, which are held several times a year.

We are also playing a part in Europe-wide efforts to increase market transparency by ensuring that as far as possible the information given to market participants is of equal quality, in terms of the content and formats. Work on harmonising these information flows began in 2007 and will continue in 2008.



## Balancing market

The electricity balancing regime was unchanged in 2007. During the period from January to October 2007 the total balancing costs were approx. €18.3 m – a year-on-year decrease of about 30% (Chart 7).

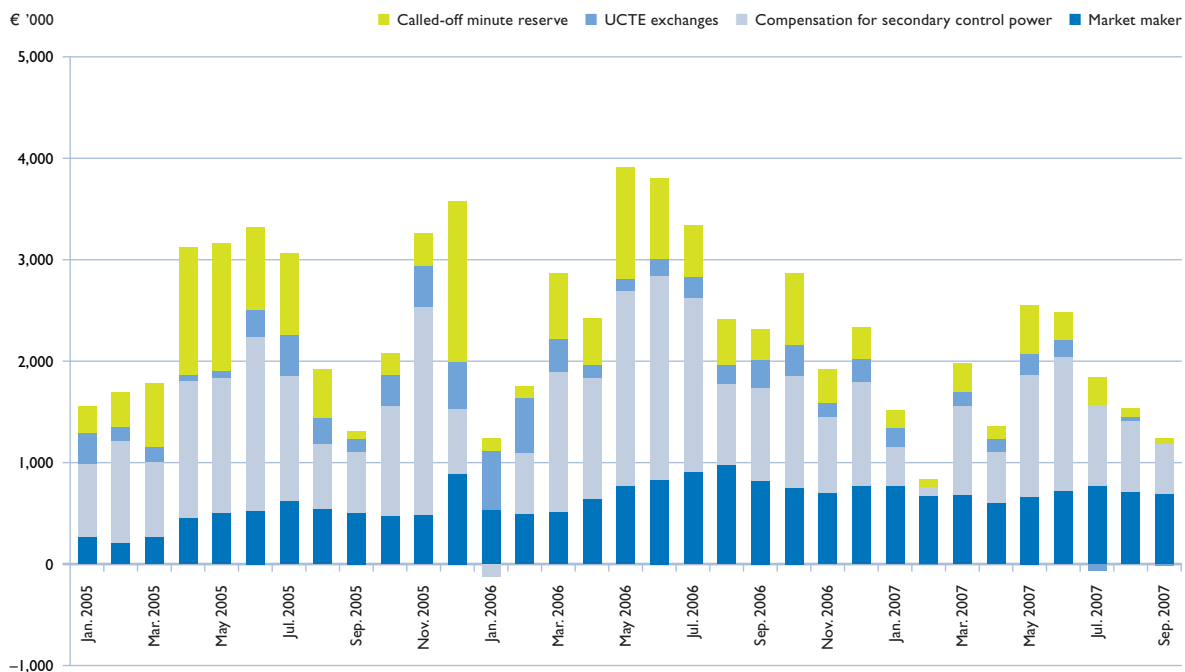
This trend is explained by the situation in the APG control area, where there were more over-runs than in the previous year. These surplus amounts were sold via the balancing market, reducing the system's overall external direct costs. E-Control and market participants are continuing to watch the effects of the balancing-energy pricing scheme in the APG control area, introduced in 2005. On average, the degree of socialisation of costs through consumption-volume-based charging remains below the intended 20%.

Consultations on secondary control continued during the year. An initial evaluation of the potential for increased competition indicated that joint tenders for the APG and Tyrol control areas could improve the situation. Issues arising from the related reciprocal provision of services, monitoring and overall control service quality are also being discussed. In the event of a definite decision in favour of competitive service-provision options for the design of the tendering process will be developed.

Problems encountered in the APG control area in 2007 created a need for advance testing of the plausibility of schedule nominations against actual generation and consumption volumes. Without such verification, schedule notifications can be used to “park” electricity in the control area, making system operation difficult if not

### → Monthly electricity balancing-energy costs

Chart 7



Source: E-Control

impossible for the control-area manager. Agreement on plausibility tests was reached between market participants and the control-area managers. Details of the data required and the communication channels remain to be settled.

### Oversight of the settlement agents

E-Control's oversight of the two settlement agents, APCS and A&B, was carried out by holding liaison meetings on current issues as required. APCS' general terms and conditions were amended to deal with differences of interpretation that had arisen during the processes related to ex-post schedule revisions. The changes have made it clear that modified versions of system loss schedules are only valid under certain conditions and require the mutual agreement of the balancing groups concerned.

In 2007 E-Control carried out a review procedure in order to redetermine the clearing fees. New cost audits were performed at APCS and A&B, on the basis of the companies' financial statements for the 2004–2006 periods.

The APCS audit focused on major changes in the accounting presentation of expenses. The main factors affecting APCS' cost structure were the expiry of most of the depreciation and amortisation charges, and the creation of an adequate liability pool for supply interruptions.

At the settlement agent for Tyrol and Vorarlberg, A&B, operating costs effectively rose in line with inflation. However, there was a change with regard to the capital base applied to the calculation of capital costs. Lower finance costs resulted in a decrease in overall costs, permitting a reduction in the clearing fees. In the past, actual demand trends in the Tyrol and Vorarlberg control areas have tended to diverge from the Wifo (Austrian Institute of Economic Research) forecasts, and we therefore assumed an annual rate of 1.2% for the review on the basis of the historic values.

The audit findings opened the way for a substantial reduction in the consumer component of the clearing fees. The rates for the trader component of the clearing fees were left unchanged. The adjustment to the consumer clearing fees will cut the transaction costs incurred by electricity-market players. The new fee structures of both settlement agents came into effect on 1 January 2008.

### → Renewable electricity and CHP activities

#### Renewable electricity

Section 25 Ökostromgesetz (Green Electricity Act) requires E-Control to draw up annual reports reviewing attainment of the objectives of the Act and changes that have taken place as compared to previous years. These reports may include recommendations for improving or adjusting the support mechanisms and other arrangements provided for by the Act. Since the renewable share (which the Act aims to increase) is influenced by overall demand, the reports now devote increased attention to electricity consumption trends. The full text of the 2007 report, entitled "Green electricity in Austria", is posted on the E-Control site ([www.e-control.at](http://www.e-control.at)) and can also be ordered in a printed version.

The recommendations of the 2007 green electricity report include:

- Action to restrain electricity demand growth;
- Increased use of hydro power, as there is still potential for environmentally sound, cost-effective expansion in Austria;
- Moderate continued expansion of wind power: as wind generation requires no fuel, additional capacity should be built, but only at suitable sites;
- A halt to the expansion of biomass and biogas capacity for the time being, due to input shortages. The prices of biomass fuel and biogas feedstock have risen sharply in recent years. Because of the danger of ratcheting

up these price increases and the inefficiency of biomass electricity generation, E-Control recommends using most biomass for heat rather than power generation.

Apart from preparing the report, we carried out the following activities during the year:

- Evaluation report on the Green Electricity (Amendment) Act 2006;
- Report on progress towards meeting Austria's national indicative targets under Directive 2001/77/EC;
- Preparation of opinions on renewable-electricity funding (2008 settlement prices);
- Preparation of submissions to assist in the determination of prices (injection tariffs) for 2008 (optional until 2010);
- Preparation of a report on electricity labelling on the basis of experience gained from E-Control's oversight of the system;
- Development of an additional interactive efficiency calculator – the "Profi-Check" – that enables visitors to the E-Control website to make a detailed assessment of their electricity consumption and provides energy-saving hints.

### Fossil-fuel-fired CHP

Since 2003 the annual procedure for setting support payments to CHP stations under the Green Electricity Act has been as follows:

1. CHP station operators submit support applications to the Ministry of Economic Affairs and Labour by 31 December of the previous year.
2. The Ministry charges experts at E-Control with checking whether the applications meet the conditions for support under sections 12 and 13 Green Electricity Act.
3. On the basis of the experts' reports the Ministry issues a notice on the preliminary CHP support tariff for the calendar year in question.
4. At the end of the year the plant operators commission reports from independent experts or auditors evidencing the fulfilment or otherwise of the support conditions, and

additional expense on the basis of actual output, costs and revenues.

5. On the basis of these reports the Ministry issues a notice establishing the definitive CHP support tariff.

In 2003 the statutory CHP support rates of 1.5 cent/kWh and 1.25 cent/kWh were reduced by 35% to 0.95 cent/kWh and 0.705 cent/kWh, respectively, and as a result only €56.9 m of the €75.7 m of CHP contributions collected were disbursed. In 2004 the CHP support rates under the Act were cut by 70% to 0.448 cent/kWh and 0.198 cent/kWh, meaning that only €24.8 m of the €77.8 m of CHP contributions collected were paid out.

In 2003 and 2004 some CHP station operators filed complaints in the administrative court of appeal and the constitutional court against the Ministry of Economic Affairs and Labour notice establishing the CHP support tariff, due the reductions in support payments in response to higher electricity prices. Most of these proceedings are still pending, and the administrative court of appeal has turned to the European Court of Justice for clarification of some points of Community law. Because of this it is not possible to state the final cost of CHP support, and all the figures given in Table 2 are provisional estimates.

Pursuant to sections 12 and 13 Green Electricity Act, since 2005 the level of the CHP support tariff has been determined by the evidenced additional expense arising from the operation of CHP stations. This has necessitated an audit of the unavoidable costs involved in continuing to operate a CHP plant, and of the revenues required for this to be economic. In the absence of a clear definition in the Act of the income and expenses eligible for recognition as a basis for CHP support, in 2005 some companies brought a complaint against the Ministry of Economic Affairs and Labour's preliminary CHP support notices in the administrative court of appeal. These proceedings are also pending.

## → CHP support payments, 2003–2007

Table 2

	2003	2004	2005	2006	2007*
Number of CHP stations for which support applications were made	53	44	41	40	39
Section 13(3) CHP electricity in GWh	5,404	5,791	5,889	5,455	5,234
Section 13(4) CHP electricity in GWh	764	733	811	710	642
Total CHP electricity	6,169	6,524	6,701	6,165	5,876
CHP surcharge in cent/kWh	0.15	0.15	0.13	0.07	Part of the flat metering-point charge

\* Amounts shown for 2007 are preliminary estimates.

Source: 2007 green electricity report; status as of August 2007

In 2006 the 0.13 cent/kWh maximum CHP surcharge provided for by section 13(10) Green Electricity Act was reduced for the first time, to 0.07 cent/kWh. The entry in effect of the Green Electricity (Amendment) Act on 1 October 2006 brought the following changes to the support criteria for existing and modernised CHP stations:

- A weighted market price under section 13(12) Green Electricity (Amendment) Act is to be used instead of actual price realisations to determine the additional expense in the meaning of section 13(1) of the Act. The market prices for the 2003–2007 period are posted on the E-Control website ([www.e-control.at](http://www.e-control.at)), under: Strom/Fachthemen/KWK/Gutachten E-Control (German only).
- The level of financial support accorded to CHP stations depends on whether they meet the efficiency standard established by section 13(2) Green Electricity (Amendment) Act, namely:  $\frac{2}{3} * \text{heat/fuel input} + \text{electricity/fuel input} = > 0.6$ . The calculation must be performed for each station or operator, on a monthly basis.

Since 1 January 2007 the resources for subsidies to existing, modernised and new CHP stations have been raised by collecting a metering-point charge (flat charge per metering point) from consumers connected to the public grid.

Section 13(10) Green Electricity (Amendment) Act caps the support that can be extended to existing and modernised CHP plants, respectively, in 2007 and 2008 at €42.5 m (€54.5 m less €12 m for investment grants for new CHP stations).

The system operators pay on the support funding for existing and modernised CHP facilities, collected in the form of lump-sum metering-point charges, to the green-power settlement agent. The latter transfers the money to E-Control, pursuant to section 13(11) Green Electricity (Amendment) Act, for processing of the payments to reimburse the additional expenses incurred as a result of operating CHP stations. If the resources generated by metering-point charges are insufficient, the support payments to all existing and modernised CHP plants must be reduced on a pro-rata basis. The efficiency threshold was increased from 0.55 to 0.60 in 2007. Five CHP stations that do not meet this support condition will probably cease to receive CHP support payments.

### → Stranded costs

Section 13 Energy Regulatory Authorities Act (E-RBG) charges E-Control with collecting, administering and disbursing stranded costs contributions. These relate to operating subsidies paid as compensation for investments rendered unprofitable by market opening. The state aids for the Voitsberg 3 brown-coal-fired generating station, approved by the European Commission, total €132.61 m. Until 30 June 2006 system operators charged their customers stranded costs contributions and passed these on to E-Control which acted as the settlement agent. In all, E-Control has disbursed €130 m to the beneficiaries. As there are still a number of pending cases before the courts of ordinary jurisdiction, the constitutional court and the administrative court of appeal, E-Control has been obliged to delay disbursement of the outstanding amount. Any residual amounts in excess of those due are returned to the system operators.

### → Statistical activities

E-Control conducted the statistical surveys for the previous calendar year (2006 generating-station and power-line inventory) and the year under review required by the Statistikverordnung (Statistics Order) 2001. We also analysed the results for 2006 and posted them on the E-Control website in July 2007. Regular monthly and quarterly reports are also prepared, and are likewise published online. We also fulfilled our international reporting duties in respect of the European Union and other organisations such as the International Energy Agency.

When the Elektrizitätsstatistik-Verordnung (Electricity Statistics Order) 2006 came into force it was necessary to adapt or completely redesign the survey forms. In the interests of continuity and avoidance of changeover problems with regard to intrayear reporting duties, the surveys

for the November and December 2007 monthly reports were conducted in accordance with the Statistics Order 2001. However the annual surveys for 2007 are to be carried out in accordance with the new regulations.

### Electricity statistics

Since the enactment of the Electricity Statistics Order 2001, BGBl. (Federal Law Gazette) II No. 486/2001, the legal environment has been transformed by the Green Electricity Act, and the 2006 amendments to the latter and the EIWOG (Electricity Act), as well as changes in EU reporting requirements. At the same time market participants are now placing new or altered demands on our statistics. It was therefore necessary to reshape statistical coverage of the electricity sector, and this was accomplished by the enactment of the Electricity Statistics Order 2007 of the Minister of Economic Affairs and Labour, BGBl. II No. 284/2007, on 16 October 2007.

Among the main new developments are a new approach to the market statistics, aimed at maximising the scope of the information on the competitive areas of the electricity market, and changes to the renewable-electricity support-payment statistics, designed to achieve transparency with regard to the size of the subsidies and the resultant amounts of green power. Meanwhile the quality of supply statistics now go beyond the presentation of system availability in terms of failures and outages, and also encompass the quality and extent of network maintenance, as well as the availability of generating units.

The range of statistical publications that E-Control is obliged to prepare has accordingly been extended and modified. However, the order confines itself to requiring publication on our website and defining the contents of the statistics.

For E-Control, as the body responsible for collecting, analysing and publishing the statistics in question, the order means altering some of the contents of the surveys and hence the questionnaire forms, adapting data storage and processing operations, and widening the scope of the analyses and publications, or introducing new ones.

Statistical surveys benefit from keeping the reporting requirements the same for as long as possible. This enables the respondents (parties subject to reporting duties) to automate their reports, which both cuts the workload and improves the quality of the data.

As the Electricity Statistics Order 2007 came into force on 1 November 2007, it was necessary to make adjustments to both the regular intrayear and the annual year-end surveys during the period under review.

In order to avoid a changeover during a reporting year, we obtained the agreement of the Ministry of Economic Affairs and Labour to leaving the scope of the monthly surveys for the 2007 operational statistics unaltered. The modifications necessitated by the new requirements will not be implemented until the monthly reporting by respondents in January 2008, and because of respondents' need to adjust to them there may be a need for a transitional period.

However, the annual surveys for the 2007 calendar year relating to the operational and inventory, and failure and outage statistics, as well as some other items, will definitely be brought into line with the new requirements.

#### Austrian failure and outage statistics for 2006

Supply security and quality is a top priority for E-Control. To help maintain electricity supply reliability, which is one aspect of security of supply, since 2002 E-Control has been carrying out statistical surveys in collaboration with the system operators and the VEÖ, in accordance with the Statistics Order.

The regulator is responsible for taking steps to monitor security of supply – and in particular supply reliability – and acting immediately to counter potential deterioration.

The collection and publication of failure and outage statistics is carried out pursuant to section 5(7), the preamble to section 11(1)(2)(3), and section 11(3)(5) of the Order of the Federal Ministry of Economic Affairs and Labour on statistical studies relating to the electricity industry (Statistics Order), BGBl II 486/2001.

As the results so far have shown, the reliability of electricity supply in Austria is affected by atmospheric influences such as rain, snow and thunderstorms. For example, in early 2006, heavy snowfall in many parts of the main northern Alpine ridge led to cases of electricity supply interruptions affecting large areas, which are reflected in the overall reliability statistics. This and increasingly frequent local weather-related supply interruptions led to a rise in the number of unplanned interruptions; planned interruptions for repair work were also up.

On 4 November 2006, Austria was also affected by a Europe-wide failure of the ultra-high-voltage grid, which impacted the reliability of the Austrian

medium-voltage networks. Due to the cause of this outage, the effects on the figures have been stripped out of the analysis discussed below.

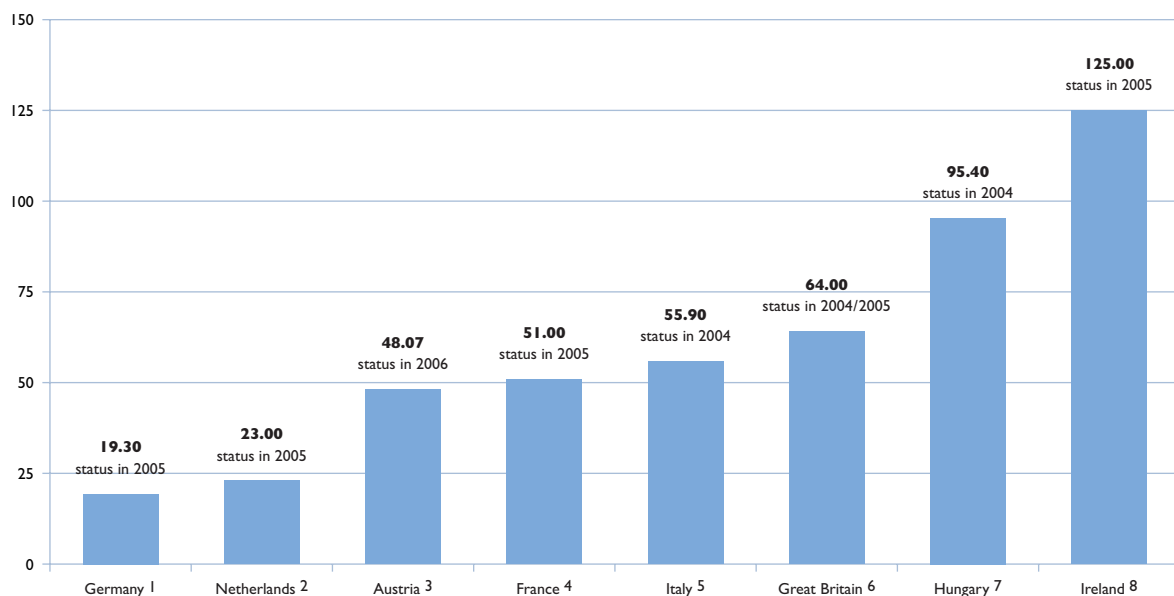
The non-availability of supply is a measure of the probability of a consumer's being affected by a supply interruption at a given point in time, or of the average length of time in a year during which a consumer experiences supply interruptions. In 2006 "unplanned" non-availability, known internationally as the average system-interruption duration index (ASIDI), was 48.07 minutes/year in Austria – above the results of previous surveys of supply reliability.

If non-availability is related to system availability over the year (number of hours), then the availability ratio in Austria for 2006 – as in every year after 2002 – is seen to have been over 99.99%, and supply reliability can thus be rated as very good. A comparison with other European countries confirms this, and also shows that Austria has one of the lowest supply-interruption rates. A comparison with annual "unplanned" non-availability in various European countries is given in Chart 8. It should be noted that the Austrian statistics are not fully comparable with those for the other countries, as complete up-to-date figures for them were not available in August 2007.

### → Annual non-availability of electricity supply on medium-voltage networks in selected European countries resulting from failure-related supply interruptions<sup>3</sup>

Chart 8

Non-availability (minutes per year)



1, 2, 4 Mean non-availability due to failure related supply interruptions in Europe, VDN, 2005

3 Mean non-availability relative to capacity, 2006

5, 7 Unplanned minutes lost per customer per year excluding exceptional events, medium voltage, 2004

6 CML, voltage level 1–22 kV, 1 April 2004 to 31 March 2005

8 SAIDI, 2004

Source: www.vdn-berlin.de

Source: E-Control, 2006

Source: CEER, Third Benchmarking Report on Quality of Electricity Supply, 2005

Source: OFGEM, Electricity Distribution Quality of Service Report 2004/2005

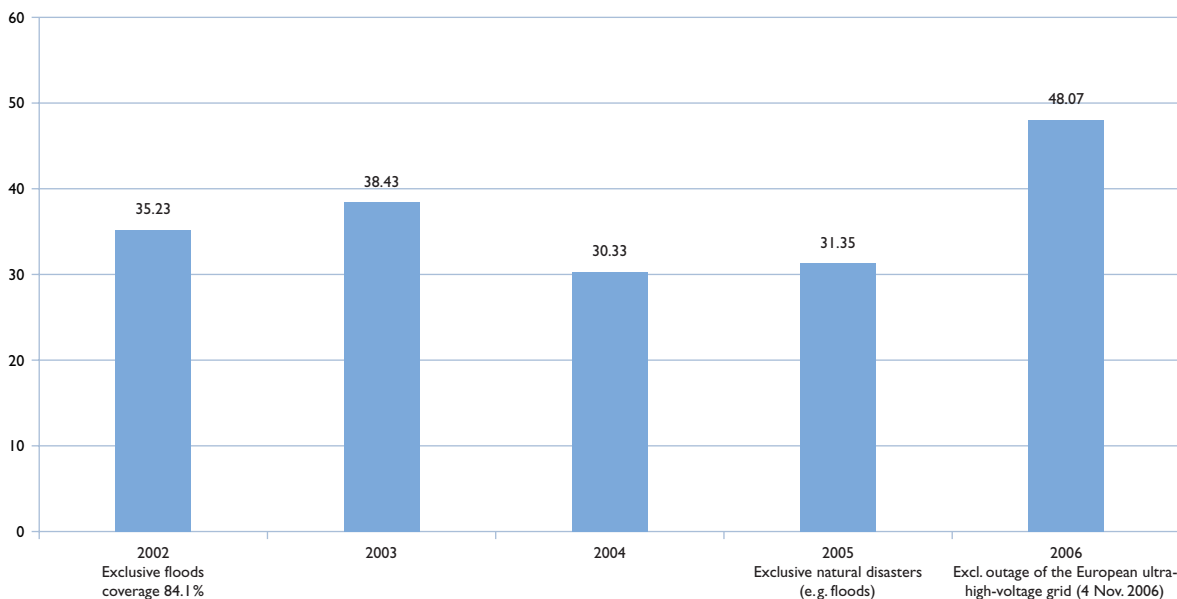
Source: CER, Decision Paper on Distribution Operator Revenues, 2005

<sup>3</sup> Austria: excluding the Europe-wide black-out on 4 November 2006

## → Annual “unplanned” non-availability of electricity supply in Austria, 2002–2006

Chart 9

Non-availability (minutes per year)



Source: E-Control

Austria remains one of a small group of European countries with complete coverage of all system operators – and hence all consumers – in its reliability survey.

Chart 9 shows the annual “unplanned” non-availability of electricity supply in Austria over the 2002–2006 period. It should be noted that the effects of the floods in 2002 were excluded from these calculations, and that the survey that year only covered 84.1% of all consumers supplied. The effects of the floods in 2002 and 2005 were reported separately, while the Europe-wide failure of the ultra-high-voltage grid on 4 November 2006 was excluded from that year’s survey.

### 2006 monitoring report on security of electricity supply

Section 20i(1) Energielenkungsgesetz 1982 (Energy Intervention Powers Act 1982) as amended by BGBl. I No. 106/2006 charges E-Control with monitoring the security of electricity supply with a view to preparing intervention measures. The information yielded by these monitoring activities may be used for long-term planning and the preparation of a report pursuant to section 14a Energy Intervention Powers Act. Monitoring of security of supply is carried under Article 4 Electricity Directive (2003/54/EC).



In order to comply with section 14a Energie-Regulierungsbehördengesetz (Energy Regulatory Authorities Act) E-Control is also obliged to prepare a report on the results of its monitoring activities under Art. 4 of Directive 2003/54/EC, and to publish it in an appropriate manner. Activities pursuant to section 20i Energy Intervention Powers Act can also be included in this report.

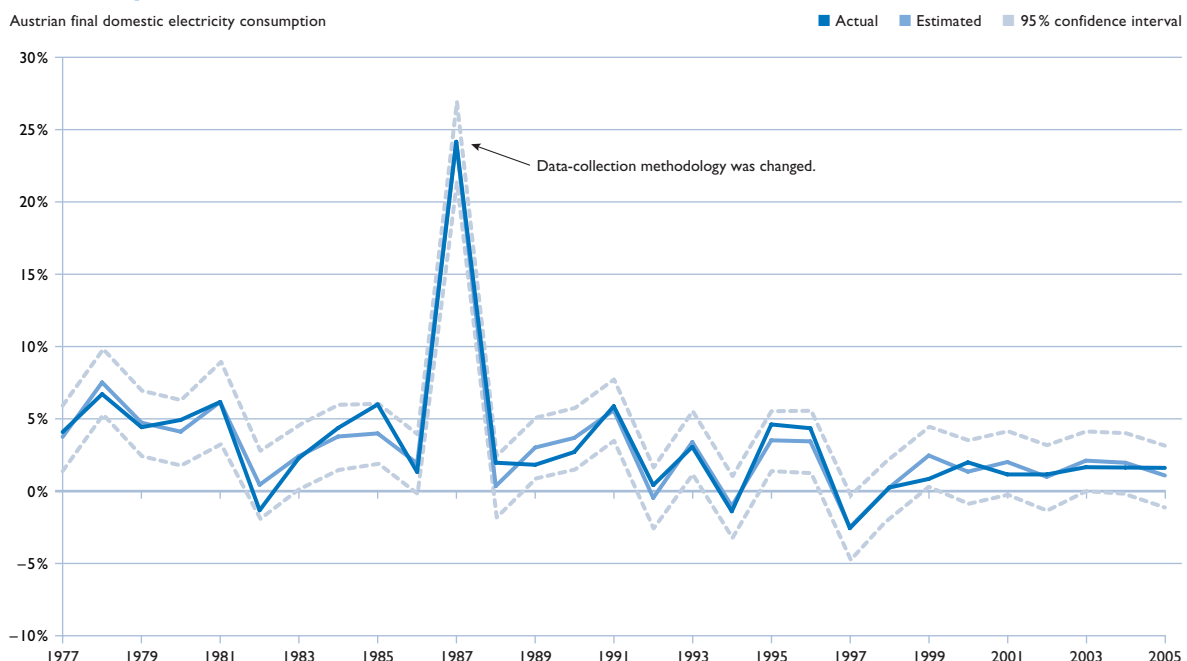
In addition to an overview of the current supply situation, the report also deals with anticipated demand trends and available supplies. Information on additional generation and transportation capacity planned and under construction is likewise relevant to the ability of the grid to meet demand. Similarly, the quality and scale of network maintenance, and measures to cover peak demand and deal with outages of one or more suppliers are important for ongoing operations

and the continuous availability of electricity, and this aspect of network availability is also discussed. To assist in the monitoring of security of supply, E-Control has developed an empirical demand model, MEDA.07<sup>4</sup>. Total demand is estimated on the basis of separate forecasts for domestic and industrial consumption.<sup>5</sup> A test of the reliability of the forecasts generated by the model, taking estimated and actual changes in Austrian domestic demand as an example (Chart 10) demonstrates that the model is capable of accurately reproducing the actual growth of electricity consumption in Austria.

A comparison of the MEDA.07 results with the model-based consumption estimates from Wifo (Austrian Institute of Economic Research)<sup>6</sup> and DG TREN<sup>7</sup> (Chart 11) reveals that the Institute arrives at an almost identical demand trend. However, there is a marked difference from the

### → Quality of forecasts made with MEDA.07

Chart 10



Sources: E-Control, Statistik Austria and MEDA.07

4 MEDA stands for: "Model of Electricity Demand in Austria" (Source: E-Control).

5 Industrial electricity consumption includes demand forecasts of the "Private and Public Services" sector.

6 Kratena, K. and M. Wüger, *Energieszenarien für Österreich bis 2020* (Energy scenarios for Austria up to 2020), Austrian Institute of Economic Research, 2005

7 European Commission, Directorate-General for Energy and Transport, *European Energy and Transport – Trends to 2030-update 2005, 2006*

DGTREN results, which is explained by the latter's use of a top-down approach, whereby the forecast European trend is extrapolated to Austria.

The MEDA.07 demand model yields final energy consumption of 67.845 TWh in 2016, which is equivalent to an average annual increase in electricity consumption of 1.7% or 1.04 TWh (Chart 11). In order to compare this figure with the forecasts in the previous monitoring report, adjustments for non-energetic final consumption, transport losses and energy sector own consumption are required. On this basis E-Control sees gross domestic electricity consumption excluding pumped storage reaching 79.7 TWh in 2016, which is still within the range of the forecasts made to date.

Comparing E-Control's forecast with those by the Austrian Institute of Economic Research<sup>8</sup>, DGTREN<sup>9</sup> and UCTE<sup>10</sup>, it emerges that a further

slowdown in the growth of electricity demand is expected by the latter two. To be precise, the Wifo efficiency scenario for the period up to 2010 predicts consumption growth of 1.5%, and an increase of 1.9% for 2010–2020. For its part, DGTREN puts average growth at 2.3% between 2000–2010, and 0.6% between 2010–2020, which explains the abrupt change in the curve. The UCTE System Adequacy Forecast 2007–2020, on the other hand, projects an average increase in consumption (up to 2020) of between 1.5–2%.

In order to assess security of supply in Austria from 2006–2016, it is necessary to compare future available generating capacity and future peak loads.

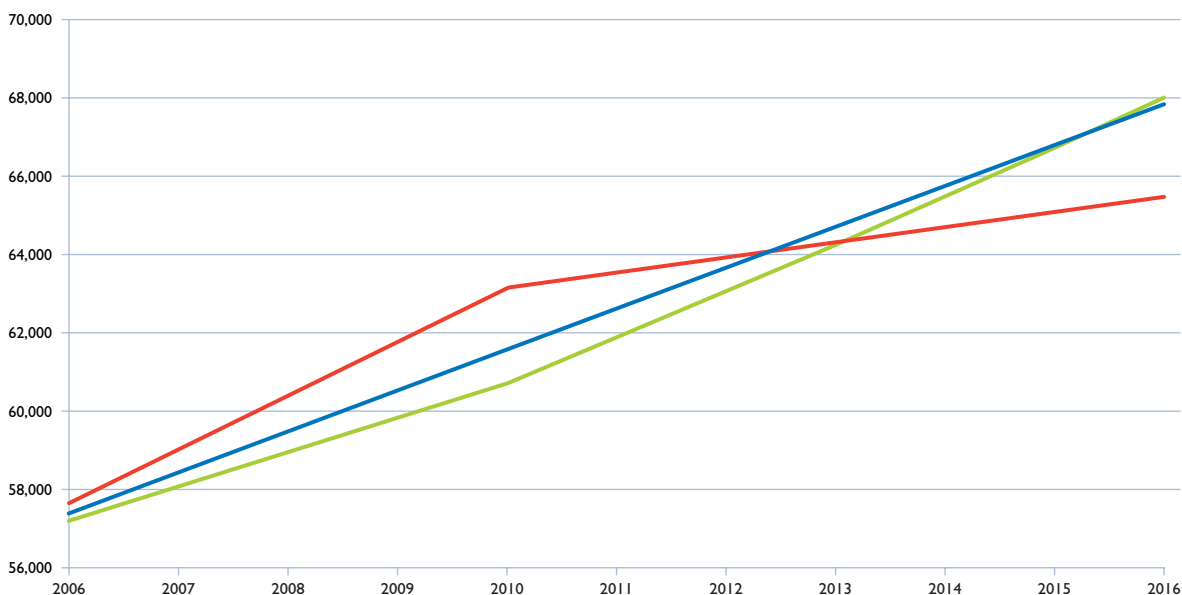
The latest surveys on the generation situation point to 7,628 MW of additional capacity by 2016, including planned and forecast expansions, and fewer planned closures and mothballings.

## → Comparison of electricity consumption forecasts

Chart 11

GWh; Austrian final electricity consumption

■ DGTREN ■ MEDA.07 (E-Control) ■ WIFO



Sources: E-Control, WIFO, UCTE and DGTREN

<sup>8</sup> K. Kratena and M. Wüger, Austrian Energy Scenarios up to 2020, Austrian Institute of Economic Research, 2005.

<sup>9</sup> European Commission, Directorate-General for Energy and Transport, European Energy and Transport – Trends to 2030-update 2005, 2006

<sup>10</sup> Union for the Co-ordination of Transmission of Electricity, UCTE System Adequacy Forecast 2007–2020, 2007 – 23 European countries, www.ucte.org

The implementation of all planned projects would bring installed generating capacity in Austria to 26,810 MW.<sup>11</sup>

While the Energy Intervention Powers Act requires the collection of information on available generating capacity it is necessary to estimate the evolution of peak loads. On the basis of MEDA.07, we expect average annual growth of 251 MW, which would mean peak loads of around 12,200 MW in 2016.

The graph comparison of available generating capacity and peak loads (Chart 12) makes it clear that the maximum forecast capacity of the available power plants would be sufficient to meet the forecast peak loads. From this it can be concluded that no supply problems will arise if all the infrastructure projects on the drawing board are implemented. However, it should also be noted that the operation of power stations is normally

market driven, and the difference between estimated capacity and peak load therefore does not equate to net exports of electricity.

The Austrian electricity grid is characterised by high levels of available capacity and good links to the European interconnected system, but further expansion within the country is also required (e.g. Styria and Salzburg line).

Overall, it can be concluded that during the period covered by the report (2006–2016), given completion of all the planned infrastructure projects (generating stations and power lines), security of supply will be assured.

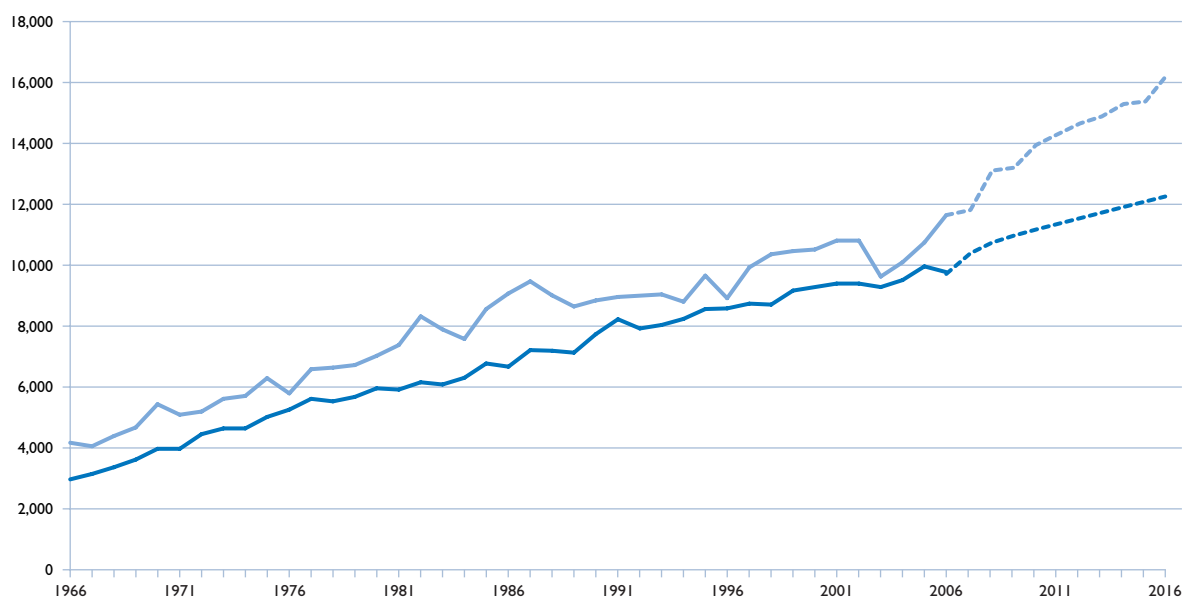
However, a look at demand coverage levels in Europe after 2016 in the light of existing power-station projects points to potential power-import problems for Austria due to lack of generating capacity.

### → Maximum output of available power stations and peak loads in Austria

Chart 12

MW; Maximum capacity on 3<sup>rd</sup> Wednesday of the month

■ Maximum output of available power stations ■ Peak load



Source: E-Control

<sup>11</sup> With regard to the power-plant projects included in the estimates, it should be noted that the probability of all the surveyed projects reaching completion was assumed to be 100%.

Price surveys

Section 9(1)(3) Energy Regulatory Authorities Act requires E-Control to prepare and publish electricity price comparisons for consumers.

Industrial-price survey

Since the second half of 2003 E-Control has been surveying the energy prices paid by Austrian industrial consumers directly, on a biannual basis (January and July). The results are posted on our website ([www.e-control.at](http://www.e-control.at)). They show an upward trend in industrial prices since 2003 (Chart 13). Price increases are most frequently seen at the turn of the year. Industrial electricity prices are mainly driven by wholesale prices, due to the fact that the latter are generally built into price formulas in the supply contracts. The elec-

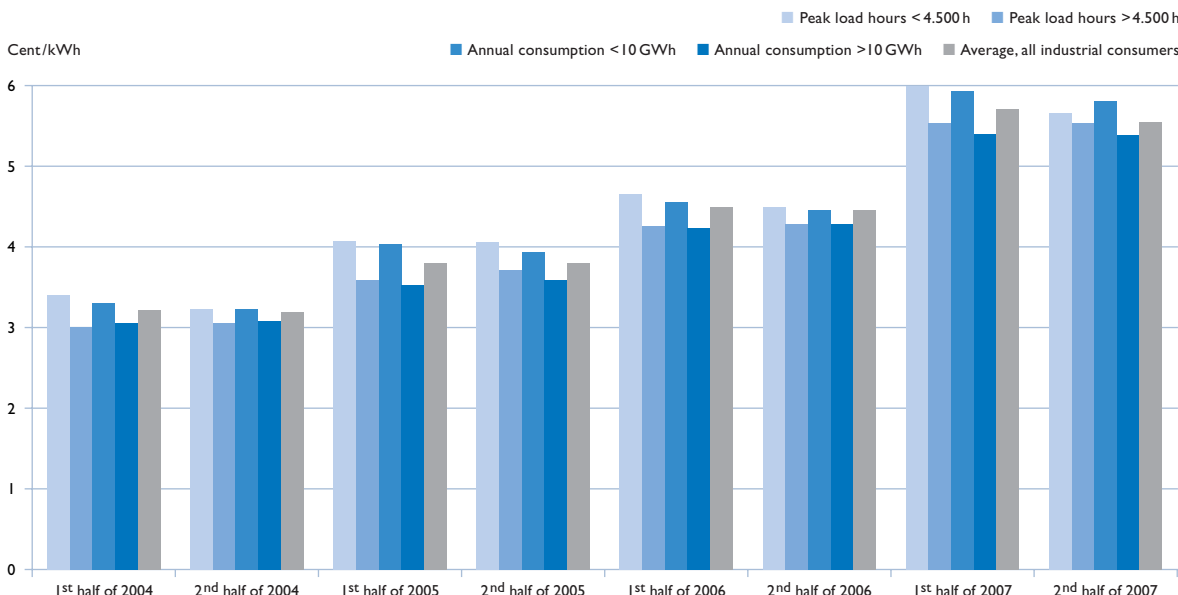
tricity prices under one- and two-year contracts are usually fixed. Some contracts with longer terms contain escalation clauses tied to wholesale prices, e.g. from the third year onwards.

Tariff calculator analysis: domestic electricity prices

Changes in the total prices paid by domestic customers (Chart 14) of the cheapest suppliers in the various grid zones over the past ten months can be observed using the tariff calculator ([www.e-control.at](http://www.e-control.at)). Prices have largely gone sideways; the changes at the beginning of 2007 were due to the reduction in system charges. The differences between overall price levels are due to those between the system charges. The gap between the highest and lowest system charges (unit rate, Grid Level 7, non-demand-metered) is about 25%.

→ Results of the industrial electricity price survey

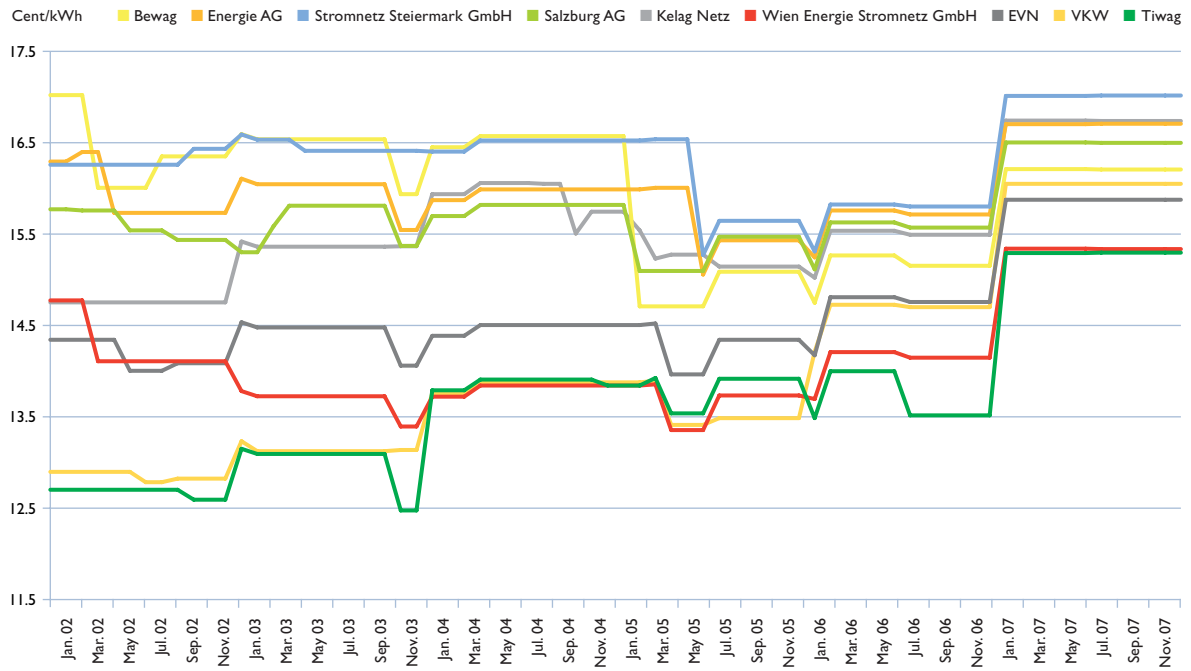
Chart 13



Source: E-Control

→ **Household electricity prices by grid area**  
 Energy, system charges, taxes and levies, cheapest supplier, 3,500 kWh/year

Chart 14



Source: E-Control



→ The Austrian gas market in 2007

Output trends

In 2006 domestic end-user natural-gas demand fell by 6.4% or 6,447 GWh, to 93,948 GWh or 8,456m normal cubic metres (N cu m). With the exception of January and March, consumption dropped throughout 2006. The main factor behind this decline was a sharp reduction in the use of gas-fired power stations.

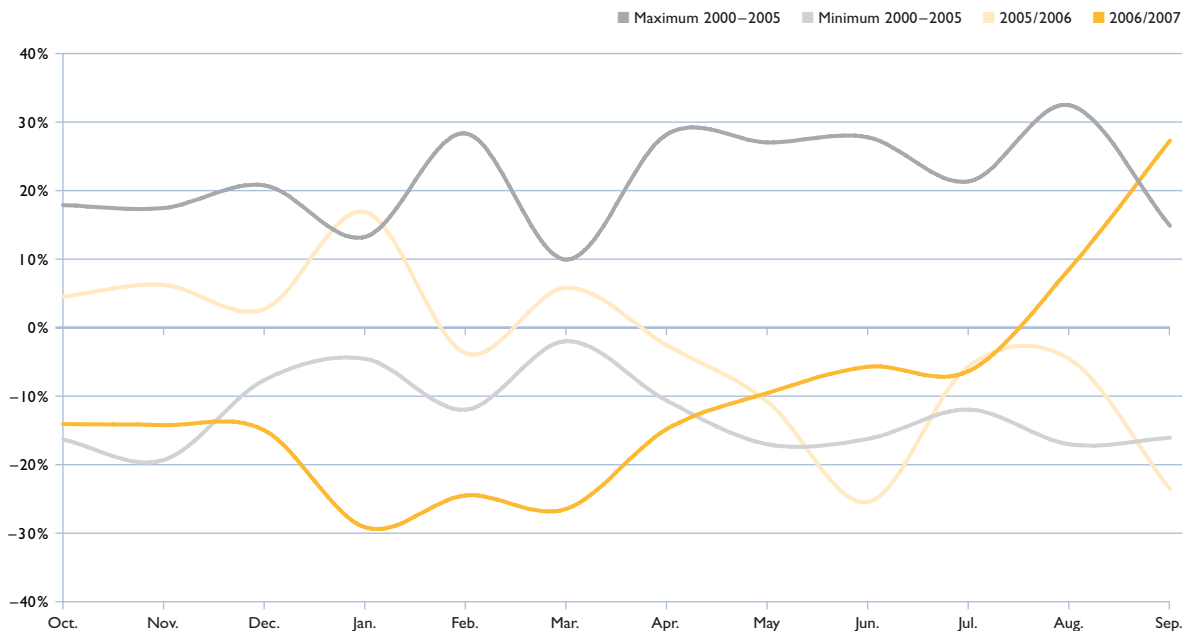
This downward trend continued in 2007. A decrease of 26.8% in supplies to end users in the first quarter was followed by one of 10.8% in the second. A sharp decline was also seen in July, but this trend reversed in the last two months of the summer, resulting in growth of 9.3% in the

third quarter. As with electricity demand, the main factor responsible for the fall in consumption in the first quarter was the comparatively mild weather. However, because gas is the most widely used energy form for heating, consumption is more strongly temperature-dependent than with electricity. Here, it should be noted that natural gas is not only used directly for stand-alone heating systems, but also indirectly, for district heating supplied by combined-heat-and-power (CHP) stations.

The highest percentage declines in consumption were recorded in the period from December 2006 to April 2007, while September saw the largest relative increase in consumption since 2000 (Chart 15).

→ Monthly changes in natural-gas supply

Chart 15



Source: E-Control

In the first three quarters of 2007 some 10,500 GWh less natural gas was supplied to end users than in the same period in 2006. This decrease was balanced by a 5,400 GWh cut in net imports and a reduction of 1,800 GWh in withdrawals from storage combined with an increase in injection into storage of 3,200 GWh (Chart 16). Domestic production fell by almost 100 GWh over the period.

As of 30 September 2007, inventories in Austrian gas-storage facilities totalled to 42,000 GWh or 90% of storage capacity. It should be noted here that action was taken to expand storage capacity during the reporting period, and additional capacity entered service during the 2006/2007 gas year. However, not all of this new capacity was earmarked for the domestic market.

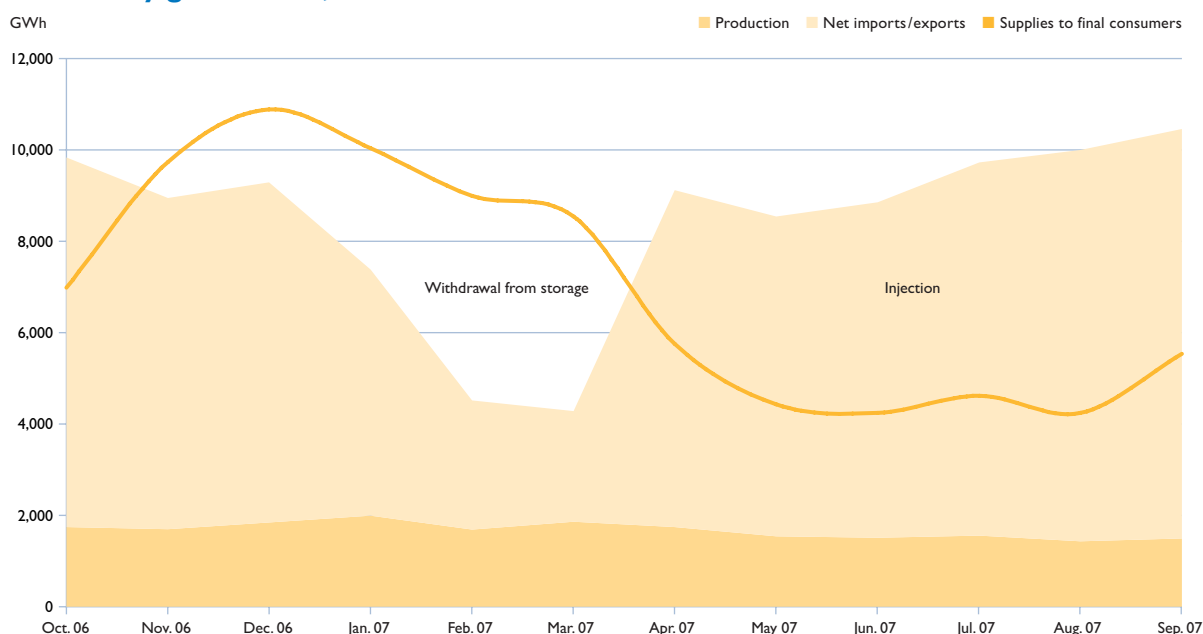
#### Price trends in 2007

Despite the reductions in system charges in January 2007, the gas CPI rose again during the year under review. The index covers not only energy prices but also the system charges, taxes and levies paid by final consumers.

As can be seen from Chart 17, since the start of 2005 gas import prices have risen considerably more than domestic rates. The main reason for this is the composition of gas prices, over 50% of which is made up by components not influenced by changes in market prices (system charges, taxes and surcharges). Increases in energy prices therefore have only a modest impact on consumers' gas bills. A series of reductions in system charges have cushioned the impact of increases in suppliers' prices in recent years.

#### → Monthly gas balance, 2006/2007

Chart 16



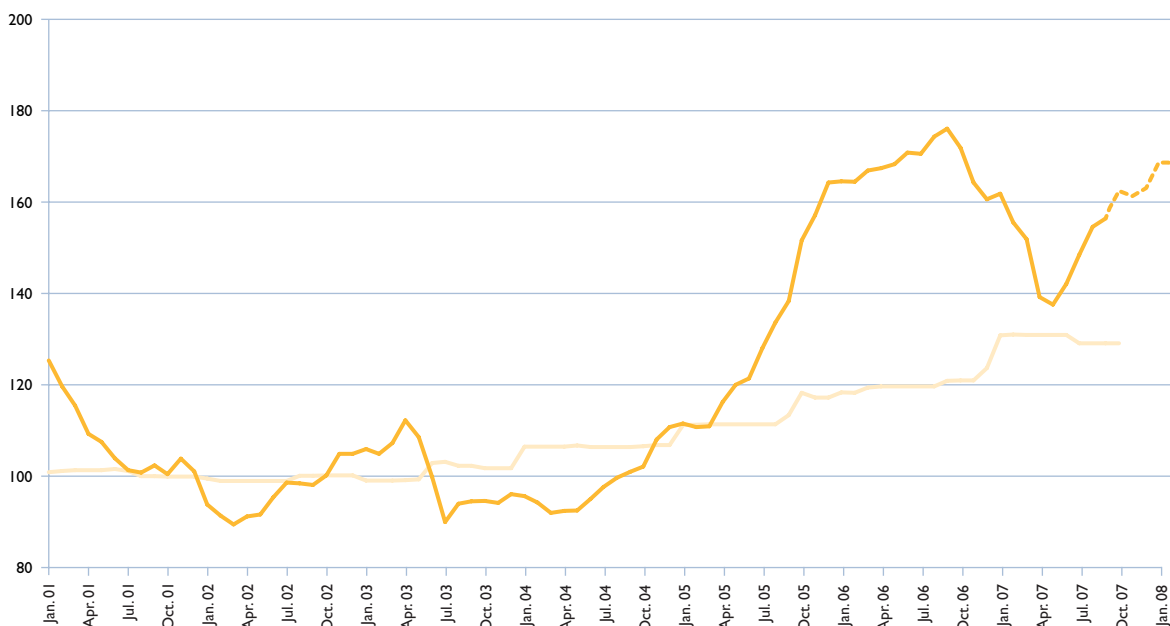
Source: E-Control

## → Evolution of gas import prices and the gas CPI

Chart 17

October 2002 = 100

■ Import price ■ Gas CPI



Sources: Statistik Austria and E-Control estimates (broken line)

*Price trends in Europe*

Charts 18 and 19 show that Austrian industrial and domestic energy and system charges are lower than in the European countries chosen for the comparison. To illustrate the underlying distribution, not only the median but also the upper and lower quartiles are used as measures of location. The meaning of the first quartile curve is that 25% of the prices in the EU are below this level. A further 25% lie between the

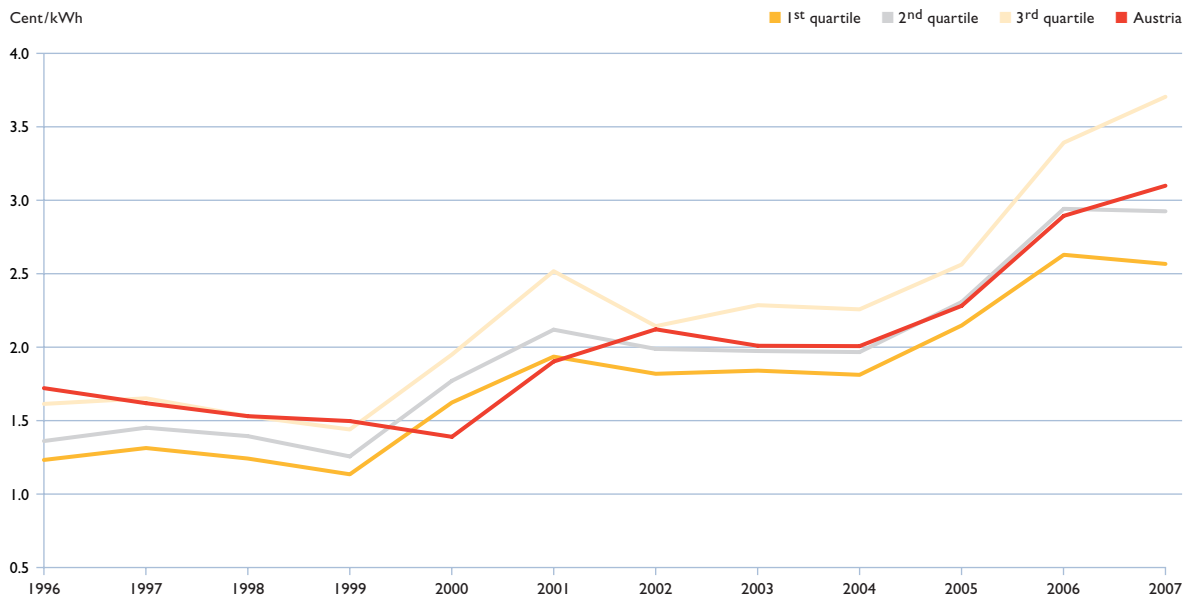
first and second quartiles, and 25% between the second and third quartiles. The remaining 25% of prices are above the third quartile.

The chart reveals that before liberalisation the gas prices paid both by Austrian domestic and industrial consumers were among the highest 25% compared to the other European countries, and that since then they have been close to the middle of the distribution.



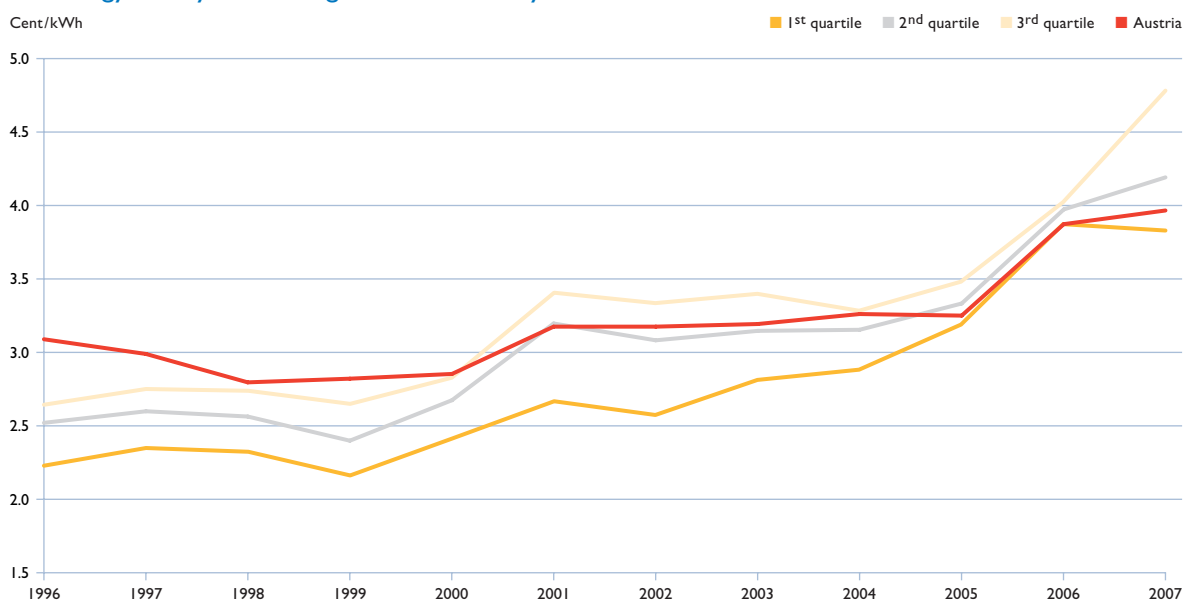
### → Comparison of industrial gas prices in Europe<sup>12</sup> Energy and system charges, 11.63 GWh/year, exclusive of tax and levies

Chart 18



### → Comparison of domestic gas prices in Europe<sup>13</sup> Energy and system charges, 23,260 kWh/year, exclusive of tax and levies

Chart 19



<sup>12</sup> Belgium, Denmark, Germany, Finland, France, Great Britain, Luxembourg, Austria, Sweden, Spain

<sup>13</sup> Belgium, Germany, France, Great Britain, Ireland, Italy, Luxembourg, Netherlands, Austria, Sweden

## → E-Control's gas market activities

### Oversight of market participants

#### *Gas System Charges Order 2008*

The E-Control Commission has enacted a new Gas-Systemnutzungstarife-Verordnung (Gas System Charges Order) which enters into effect on 1 February 2008. This has also led to amendments to the Gas-Regelzonenführer-Verordnung (Gas Control-Area Managers Order) and the Fernleitungsanlagenverordnung (Transmission Systems Order).

Since the full liberalisation of the Austrian gas market in October 2002, the system charges have been reduced by an average of over 17% or €100 m. Thanks to the adoption of a new cost-evaluation system based on the performance of the most efficient system operators further savings are likely.

The least efficient firms are to be brought up to the level of the most efficient within two regulatory periods, i.e. ten years. There will not be a review for the first five years, but there will be annual adjustments to the gas system charges. During the consultation procedure in the run-up to the enactment of the second amended GSNT-VO (Gas System Charges Order) 2006, discussions with the Fachverband Gas/Wärme (Natural Gas and District Heat Association) were initiated with a view to developing a suitable incentive-regulation system for the gas sector, following the introduction of such a model in the electricity sector. It was not possible to issue a new Gas System Charges Order between the conclusion of these negotiations and the end of the year, though the model development process has now been completed. This has opened the way for an incentive-regulation system that is satisfactory both from the perspective of the majority of the Natural Gas and District Heat Association's members and from a regulatory point of view.

While the design of the system draws heavily on the experience of the electricity sector, as well as the verdicts of the constitutional court on regulation in this industry, it also takes account of the special features of the gas industry.

The Gas System Charges Order 2008 and the explanatory notes, which contain a precise description of the new incentive-regulation system, were distributed for comment towards the end of 2007, and the order was issued on 25 January 2008, with an effective date of 1 February 2008.

#### *Cross-border exchanges (transits)*

The Energie-Versorgungssicherheitsgesetz (Energy Security of Supply Act) 2006, BGBl I No. 106/2006, introduced new arrangements for transits under sections 31e ff GWG (Natural Gas [Amendment] Act). Section 31e Natural Gas Act requires transmission-system operators and holders of transportation rights to accord system access to third parties according to general terms and conditions approved under section 31g Natural Gas Act and at use of system charges calculated according to methods approved under section 31h Natural Gas Act.

The Natural Gas (Amendment) Act 2006<sup>14</sup> contains provisions governing cross-border tariff determination which entered into force on 1 January 2007. The Act transposes Directive 2003/55/EC and Regulation (EC) No 1775/2005 by requiring transmission companies and holders of transportation rights to provide access to their networks on the basis of charges that conform to the principles of cost reflectiveness and non-discrimination. The methods for calculating the rates require the ex ante approval of the E-Control Commission.

Like domestic conveyance, cross-border transportation is now subject to regulated network access on the basis of general terms and conditions, and cost-based tariff-calculation methods which must be approved by the regulator.

<sup>14</sup> Natural Gas Act, BGBl. I No. 121/2000 as amended by Federal Act BGBl. I No. 37/2007.

However, the Natural Gas (Amendment) Act allows for a variety of approaches to certain calculation parameters and to the manner in which tariffs for cross-border transportation are determined.

The companies' terms and conditions must include detailed rules for the calculation of tariffs on the basis of capital costs, depreciation and operating costs. Applications for clearance of the tariff calculation methodologies must be accompanied by tariff benchmarking analyses giving an indication of the reasonableness of the resultant rates in comparison with those for like services elsewhere in Europe. Once approved, the tariff calculation methods must be posted on the

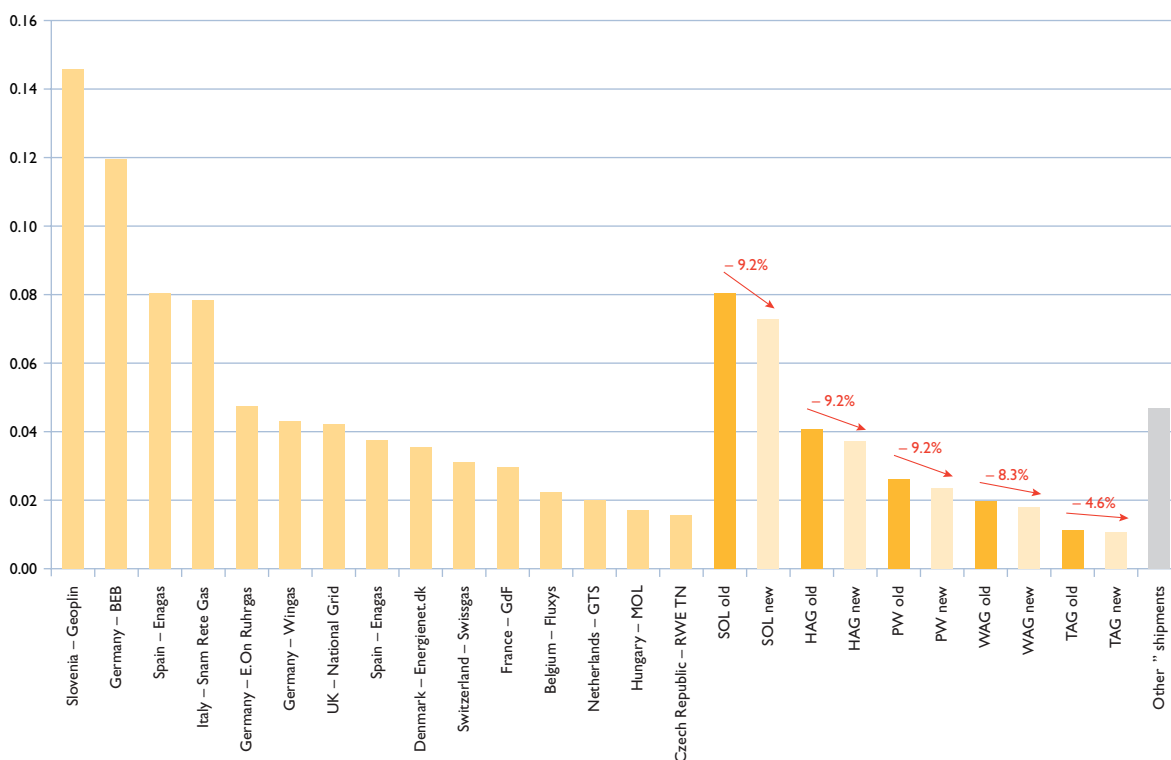
transmission-system operator/transportation rights holder's website. After exhaustive scrutiny the tariff-setting approaches of OMV Gas GmbH, TAG GmbH and BOG GmbH were approved by notice of the E-Control Commission. These methods have reduced the use of system charges applicable to the transmission systems concerned by between 4.6–9.2% (Chart 20).

It is regrettable that the companies concerned (BOG GmbH, OMV Gas GmbH and TAG GmbH) failed to comply with the 1 January 2007 deadline for the submission of appropriate tariff calculation methodologies. Applications for approval were indeed made, but these did not meet the requirements of the regulatory authority.

### → Gas transmission rates in selected EU member states

Chart 20

Rate (€/kWh/h/km/y)



Source: E-Control

*“Other” shipments*

Section 31h (5) Natural Gas Act mandates the E-Control Commission with the determination of system charges for “other” shipments of natural gas to control-area exit points, applying sections 23 ff Natural Gas Act by analogy. In exercise of these powers the Commission enacted the *Sonstige Transporte-Systemnutzungstarifverordnung* (SonT-GSNT-VO 2007 [Other Shipments System Charges Order]), published in issue no. 189 of the Official Gazette supplement of the *Wiener Zeitung* on 28 September 2007, at the request of a system user. The order establishes the use of system charges for shipments from production systems and storage facilities, and for transits through the control area. It introduces two distance classes – shipments of up to and over 150 km – in the interests of cost-reflective tariff determination.

In line with the principles of inland tariff determination, which are subject to sections 23 ff Natural Gas Act, a postage stamp system was adopted. Pursuant to section 23a (3) Natural Gas Act, the charges comprise capacity and energy components, the former being based on a one-year period. The use of system charges are established by determining an energy and a capacity component. The weighting is according to the ratio of capacity and energy parameters employed by the Gas System Charges Order for cost cascading. The cost, volume and capacity data used for the calculation is derived from the control-area data requirements established by the current Gas System Charges Order, and would need to be adjusted in the event of amendment of the order.

The shares of the use-of-system charges due to system operators affected by a shipment are allocated according to the respective lengths of the pipeline systems used. The lengths of

the pipelines used for shipments are shown in a matrix, agreed with the system operators, displaying all the potential transport routes. The order thus establishes the proportionate allocation of the use of system charges.

Section 31e(1) Natural Gas Act states that an application for third-party system access for cross-border “other shipments” must be submitted to the system operator concerned. The latter must forward the application to the control-area manager, to enable an assessment of available capacity to be made. If network access within the territory of the Eastern control area requires contracts with more than one transmission-system operator, then section 31e(2) Natural Gas Act requires that the application be made to OMV Gas GmbH, which is to act as a one-stop-shop coordinator. Here, too, the capacity assessment is performed by the control-area manager. The eligible customer and the system operators concerned are responsible for executing the contract.

The Other Shipments System Charges Order 2007 goes beyond the explicit wording of section 31h (5) Natural Gas Act, and governs not only cross-border “other shipments” of natural gas from production systems or storage facilities to control-area exit points but also all cross-border shipments through the control area to exit points. Due to the assumption that exports from the control area are only made from production systems or storage facilities, the Act confines itself to legislating for these matters. However, experience has shown that requests are also made for shipments that are transited through the control area and require no interim storage within it. The regulatory issue was redefined as described above in order to close this regulatory gap and ensure that different tariff systems are not applied to shipments on a given pipeline system.

### *Unbundling compliance by gas system operators*

The unbundling rules established by the Gas Directive 2003/55/EC are aimed at promoting effective competition and preventing discriminatory behaviour by system operators. This implies a clear separation of gas distribution and supply, independent action of system operators that are kept at arm's length from the owner's retail operations, and strictly non-discriminatory treatment of all suppliers by the system operator.

#### Legal basis

“Organisational” or “functional” unbundling is governed by section 7(3) Natural Gas Act. One aspect of organisational unbundling is the preparation of a compliance programme under section 7(3)(c) Natural Gas Act.

This provision requires system operators – and since 2007 also holders of transportation rights – to draw up compliance programmes stating what action is to be taken to prevent discriminatory behaviour. These programmes must set out the special duties of staff members with regard to equal treatment of customers. If a system operator or transportation rights holder belongs to an integrated gas company, the management of the parent must appoint a compliance officer responsible for drafting the programme, monitoring compliance with it and reporting to management. The compliance officer must submit annual reports to E-Control on the measures taken, which must be published. E-Control's synopsis report on compliance in 2006 only discusses the reports of system operators and not those of transportation rights holders, as the latter's reporting duties only came into effect in 2007. The 2007 synopsis report, to be compiled in 2008, will refer to the reports of transportation rights holders.

### Annual report by E-Control on Austrian gas system operators' compliance programmes

To date, the practice has been for E-Control to prepare a synopsis report on all system operators' compliance programmes and post this on its website, the last such report was published in August 2007. The system operators are free to post their compliance programmes on their own websites, as well, and we have advised them to do so.

During the previous reporting periods of 2003 (incomplete)/2004 and 2005 we wrote to the system operators towards the end of the year to request submission of their annual reports pursuant to section 7(3) Natural Gas Act.

The companies sent their reports to us punctually, and in most cases went into the special issues that they had agreed to discuss. We used the documentation received from the companies to compile a combined report entitled “Austrian gas system operators' compliance programmes” which was posted on our website in August 2007 (German only).

The findings of the report can be summarised as follows:

- **Organisational separation of system operation and competitive activities**  
At most companies there are still close ties between the monopoly and competitive areas of operations in organisational and personnel terms. Though they are seldom illegal, these links tend to restrict competition and put the non-discriminatory treatment of market participants at risk. The only improvement identified by the latest report was in efforts to protect commercially sensitive information.

→ **Marketing of energy and system services**  
Energy and system-services marketing are organisationally or even legally unbundled at most companies, but in the vast majority of cases service contracts between the two result in the provision of both forms of services by the same staff members. There was no significant improvement in this area as compared to the previous reporting period. However, there are now signs of efforts to sensitise employees who market both system-operation services and energy to the issue of discrimination, and to provide them with special training. For instance, some companies are producing or already using information leaflets for distribution to applicants for network connections. These draw attention to the possibility of selecting an alternative supplier.

→ **Protection of commercially sensitive data**  
Some companies have defined the information concerned in great detail in their compliance programmes, but others have made no improvements and merely cite the relevant legislative provisions. There has been a noticeable change in the companies' approach to data-access management, to the extent that the unbundling rules have led to a greater awareness of the shortcomings of existing solutions. However, as in the previous reporting period, not a single written data-access concept was submitted. Some progress on the protection of commercially sensitive data was identified, as compared to the previous period, but here, too, the current overall situation remains unsatisfactory.

#### Summary

The third E-Control synopsis report on compliance programmes shows that the gas system operators have met the legal unbundling require-

ments according to the letter of the law. However, the parent companies have exploited the room for interpretation left by the statutory provisions by providing the system operators with scant capital or staff of their own, meaning that they are obliged to buy in the resources required to perform virtually all of their core functions under service contracts. The services concerned are predominantly purchased from fellow group companies. The terms of these contracts regarding pricing and service specifications betray that they would not have been concluded with non-group firms, and thus that the system operators are in reality not commercially independent.

#### Oversight of control area managers (long-term planning)

Section 12b (1)(4) in conjunction with section 12e Natural Gas Act obliges Austrian Gas Grid Management AG (AGGM AG) to draw up a long-term plan for the Eastern control area meeting the objectives set out in section 12e(1) of the Act at least once a year. The latter provision states that the objectives of the long-term plan are to ensure that the gas transmission grid:

- Fulfils the demand for transport capacity to supply final consumers and is adequate to cope with emergency scenarios;
- Achieves a high level of system availability (adequate infrastructure to maintain security of supply); and
- Meets the need for capacity for “other shipments”.

All market participants, including transmission- and distribution-system operators, balancing-group representatives, suppliers, producers, storage companies and holders of transportation rights have a duty to participate in the formulation of long-term plans by providing information at the request of AGGM. Where this concerns

gas pipeline systems that do not have the sole function of supplying the domestic market, long-term plans must reflect any increases in the transportation capacity reserved for domestic supply.

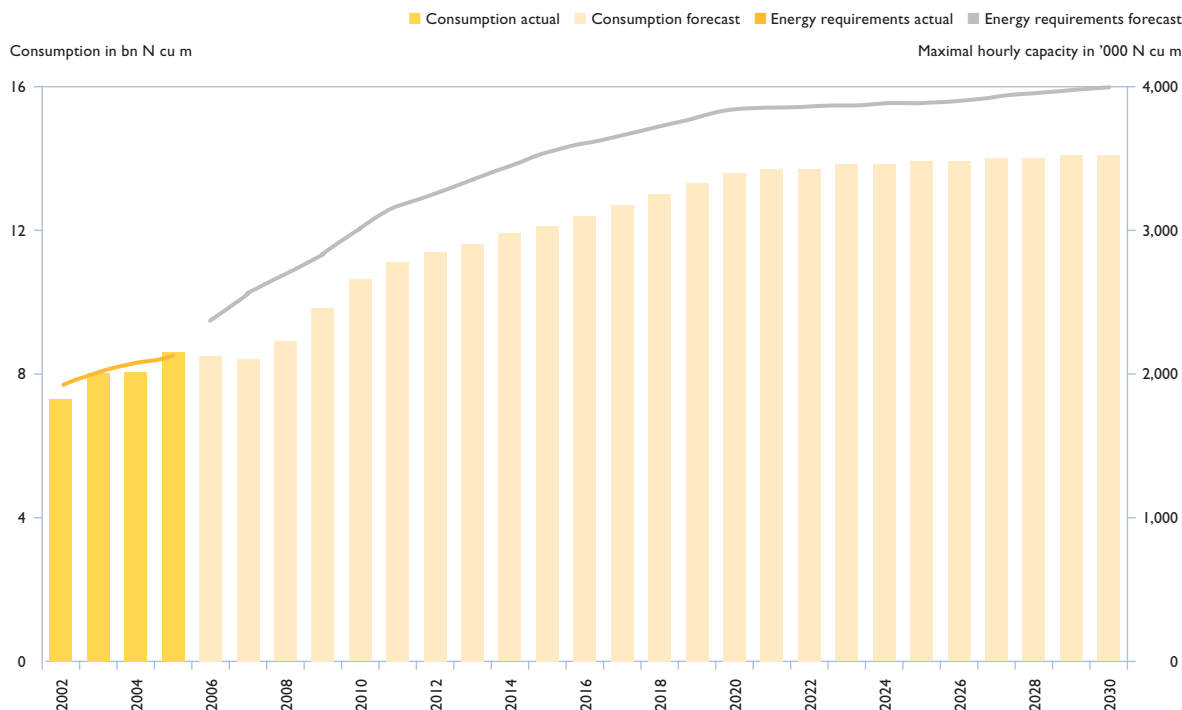
Pursuant to the objectives set out in section 12e Natural Gas Act, AGGM is required to base its sales volume forecasts (Chart 21) and planned measures on the maintenance of full supplies to connected customers and applicants for connections. At present there are cases in which only curtailable capacity can be allocated for “other shipments”. There are no plans for eliminating this congestion as the shippers accept

the restrictions, and no capacity-expansion applications have been made. The measures to be taken are planned on the basis of the distribution operators’ and suppliers’ forecasts, as well as capacity expansion applications under section 19a (2a) Natural Gas Act.

During the year under review AGGM submitted a report on the 2007 long-term plan, taking account of the objectives established by section 3 Natural Gas Act, for approval. This plan was approved by the E-Control Commission on 29 August 2007 and is posted on AGGM’s website ([www.aggm.at](http://www.aggm.at)).

→ **Maximum hourly capacity and demand in the Eastern control area**  
 Actual values for the 2002–2006 gas years and estimates for the “NB\_Max” scenario for the 2007–2030 gas years

Chart 21



Source: AGGM, 2007

## Monitoring of projects from the 2006 long-term plan

### Progress of projects included in the 2006 long-term plan

- Project 2005/4: WAG Kirchberg metering-station expansion  
The project was implemented during the fourth quarter of 2007.
- Project 2006/1: Feasibility Study 07  
The study has been completed. The “V3 + West” option was identified as the best solution.
- Project 2006/2: Planning and preparatory works for southern line and TGL  
Planning and site-preparation work by OMV Gas GmbH, EVN and GSG for the Baumgarten-Weitendorf pipeline link is in progress. Pursuant to the notice approving the 2006 long-term plan, SAG was not awarded a contract for site preparation, as the Feasibility Study 07 did not come down in favour of variants involving interconnection with the TGL.
- Project 2006/3: Purchase of short-term capacity on the TAG  
As requested, OMV Gas GmbH took part in the auction of TAG annual contracts and was the successful bidder for capacity to serve Weitendorf. By agreement with AGGM the company withdrew from the auction of capacity serving Carinthia due to the extremely high price level. AGGM then arrived at a solution involving the procurement of the necessary capacity on the secondary market in consultation with all the market participants concerned, as part of the congestion management measures under section 12g Natural Gas Act, and submitted this as an application for an amendment to the 2006 long-term plan.
- Project 2006/4: Purchase of short-term west-east capacity on the WAG  
Up to 327,500 N cu m/h of the approved 380,000 N cu m/h was used on a short-term basis. The reason for this was “other shipments” for injection to storage. Despite

a 30% reduction in final consumer capacity it was not possible to carry out these shipments within the limits of existing capacity.

### Planning information for the 2007 long-term plan

The same model was used to prepare the 2007 long-term plan as in previous years. However, the Feasibility Study 07 and the Natural Gas (Amendment) Act 2006 led to both temporary and lasting changes in the planning process. Account was also taken of the procedural rules established by section 19a (2a) Natural Gas Act and the related market rules for the treatment of system-access applications in the form of capacity-expansion applications.

The information used as a basis for dimensioning network infrastructure was the maximum hourly load (average of maximum hourly sales volume in 2004, 2005 and 2006) of each grid area (WINTER/NB\_Max sales scenario). Future demand notified up to the start of 2007 was measured in the same way. Capacity growth will mainly be driven by the power-generation sector.

The findings of the Feasibility Study 07 were the basis for the selection of the projects incorporated in the 2007 long-term plan.

### Feasibility Study 07

The Feasibility Study 07 was prepared between September 2006 and May 2007. It summarises the project-development work and project outcomes from the perspective of the control-area manager as the body responsible for long-term transmission network planning.

The main objective of the Feasibility Study 07 was:

- To determine the most efficient solution, capable of timely implementation, for meeting estimated capacity requirements in the Eastern control area in the long term, taking account of the evolution of demand over time.



The option selected is intended to meet the following subgoals:

- Low costs for the control area (must be capable of being covered by acceptable charges);
- Assurance of feasibility;
- Sufficient capacity expansion to meet demand;
- Opportunities for additional expansion in response to future demand growth.

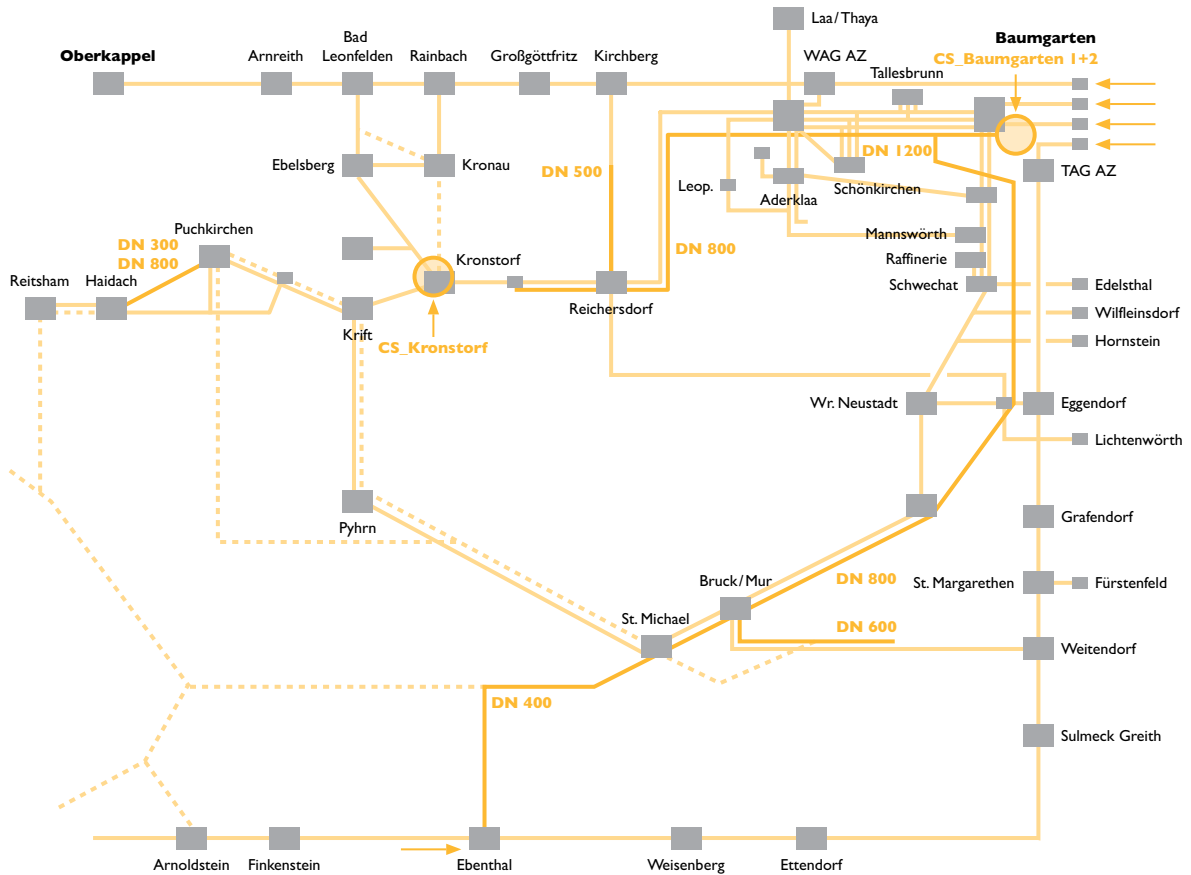
In order to facilitate the planning work the routes were broken down into sections, which were ultimately combined into four basic versions.

Each version consists of a number of pipeline sections which must be executed together and constitute one investment package. Winter peak sales and summer demand scenarios for each basic version were tested to verify that all the identified congestion due to direct or indirect (“other shipments” to storage facilities) supply of final consumers in the Eastern control area would be eliminated by 2030. All the versions were optimised using hydraulic calculations.

On the basis of the final evaluation the project team recommended the implementation of the

→ “V3 + West” option

Chart 22



Source: AGGM, 2007

“V3 + West” option, as the best long-term solution to the current capacity bottlenecks (Chart 22). Project execution is due to commence as soon as the network expansion contracts have been signed.

#### *Action required*

The forecast congestion in the Eastern control area can only be overcome if the projects listed in the long-term plan are implemented. Implementation of the findings of the Feasibility Study 07 depends on network customers who have notified capacity requirements providing the necessary contractual safeguards for network development by signing capacity-expansion agreements with the system operators concerned.

#### **Oversight of settlement agents**

In 2007 E-Control carried out a review procedure in order to redetermine the clearing fees charged by A&B (Tyrol and Vorarlberg control areas) and AGCS (Eastern control area). As part of this tariff review the companies' costs were audited for a second time, following an initial audit in 2004; the basis was their financial statements for the 2004–2006 period.

AGCS originally leased personnel from APCS, but on 1 January 2006 the workforce was transferred to Clearing Integrated Services and Market Operations GmbH (CISMO), and the human resources have since been bought in from this company.

The operating costs of the settlement agent for Tyrol and Vorarlberg, A&B broadly moved in line with inflation. However, there was a change with regard to the capital base applied to the calculation of capital costs. Lower finance costs led to a fall in overall costs, permitting a reduction in the clearing fees.

As with the approach to determining the gas system charges, the average change in the last three available annual figures was applied to the projections of volume growth for both settlement agents. In order to include the unusually warm winter of 2006/2007 in the calculation, the forecasts for 2008 were based on the averages for the period from 1 July 2004 to 30 June 2007.

The audit findings resulted in a 15% reduction in the consumer component of the clearing fees. The rates for the trader component of the clearing fees were left unchanged. The new clearing fees came into effect on 1 January 2008.

#### **Balancing market**

In 2007 the monthly physical balancing-gas requirements of the manager of the Eastern control area (buy and sell) remained at the low level witnessed in the previous two years (Chart 23).

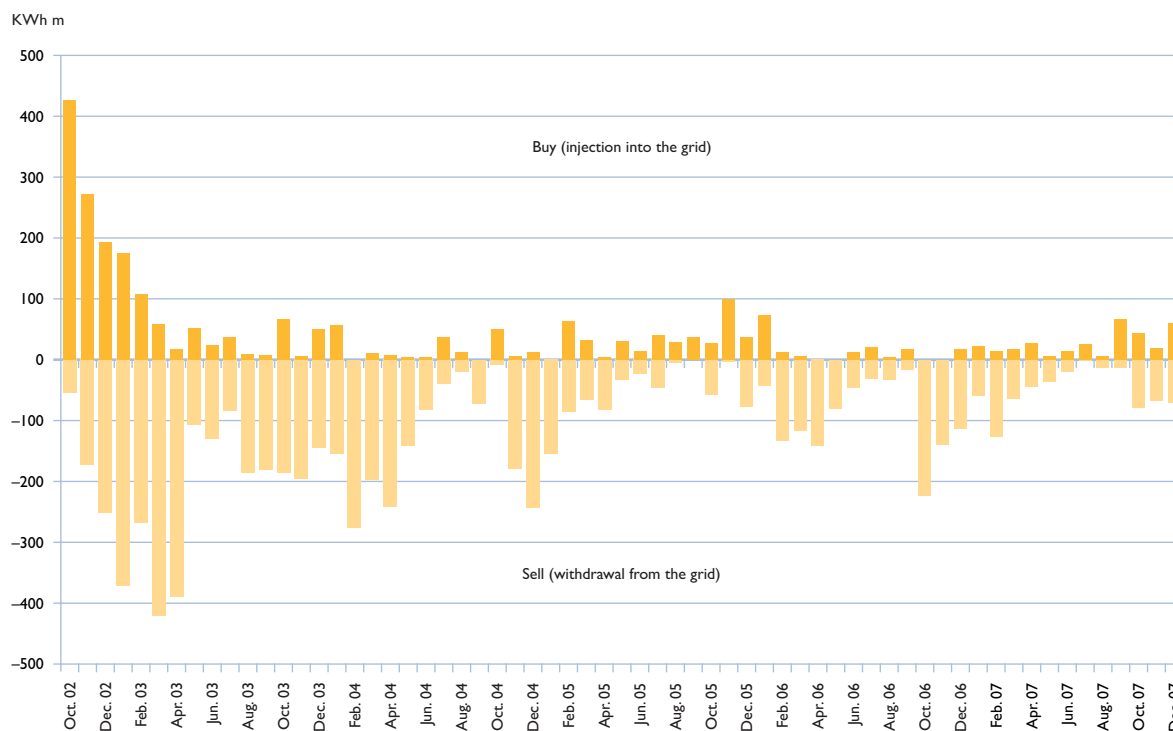
Since mid-2004 the balancing energy called off by the manager of the Eastern control area has been running at 1–2% of total monthly gas demand (Chart 24). The amount of balancing gas required by the control-area manager in 2007 represented 1.11% of total gas consumption in the Eastern control area (2006: 1.45%).

In 2007 it was again apparent that the balancing market is taking on the role of a spot market, with some balancing groups using it to buy or sell gas by making over- or under-deliveries. This demonstrates that balancing prices are at competitive levels. In 2007 total accrued balancing energy (the extent to which commercial balancing groups are long or short) was equal to 4.0% of total gas consumption in the Eastern control area – down from 4.3% in 2006.

During the year under review balancing-gas prices fell sharply from the high levels recorded in 2006. The average buying price for balancing

### → The Eastern control area manager's monthly balancing-gas requirement (buy and sell, since October 2002)

Chart 23



Sources: AGCS and E-Control

gas imported into the Eastern control area fell from €38.4/MWh in 2006 to €23.6/MWh in 2007, while the average selling price for balancing-gas exported out of the control area decreased from €20.5/MWh to €15.3/MWh (Chart 25). Balancing-gas prices rose during the last quarter of 2007 but failed to regain the previous year's high levels.

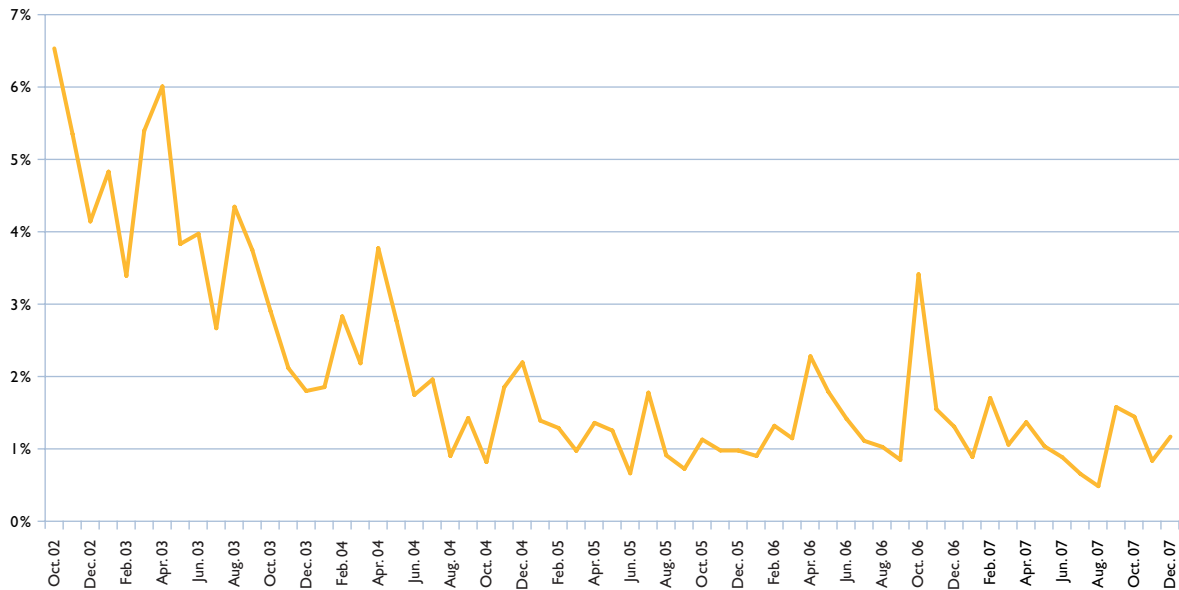
Since the change in the price formula for hours in which no physical balancing gas is called off and the action to improve linepack use taken in

October 2003, the system losses and own-use balancing groups have recorded revenues in most months – a trend that persisted in 2007. These balancing groups posted positive net revenue for the first time in 2006, and extended these gains in 2007.

The monthly reports on hourly, daily and monthly balancing-market trends that we have been producing since October 2003 are posted on the E-Control website ([www.e-control.at](http://www.e-control.at)).

→ Physical balancing-gas sales as a proportion of total consumption in the Eastern control area (since October 2002)

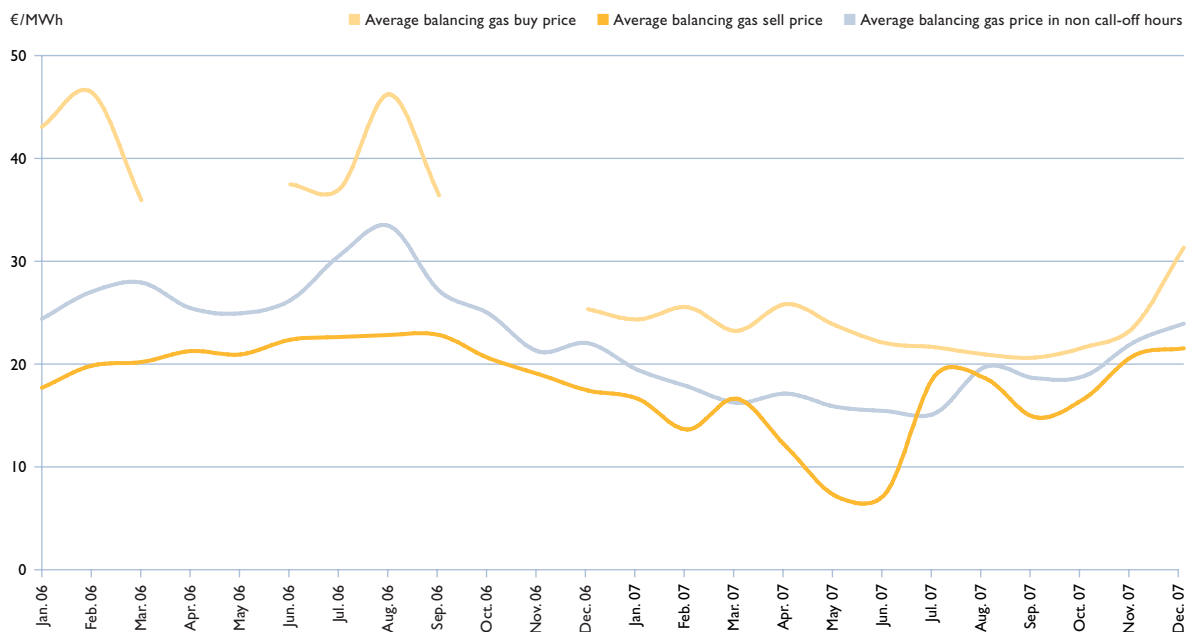
Chart 24



Sources: AGCS and E-Control

→ Balancing-gas price trends, 2006/2007<sup>15</sup>

Chart 25



Sources: AGCS and E-Control

<sup>15</sup> In April, May, October and November 2006 the control-area manager was not obliged to buy any balancing gas for injection into the grid, and as a result there are no purchasing prices for these months

## 2007 gas-release programme

Clearance of the part-merger between the EnergieAllianz partners (Wiengas, OÖFG, Begas, EVN AG and Linz Gas Wärme) and OMV Erdgas (now OMV Gas) that created the EconGas joint venture was made conditional on the fulfilment of various commitments by the parties, one of which was the implementation of a gas-release programme.

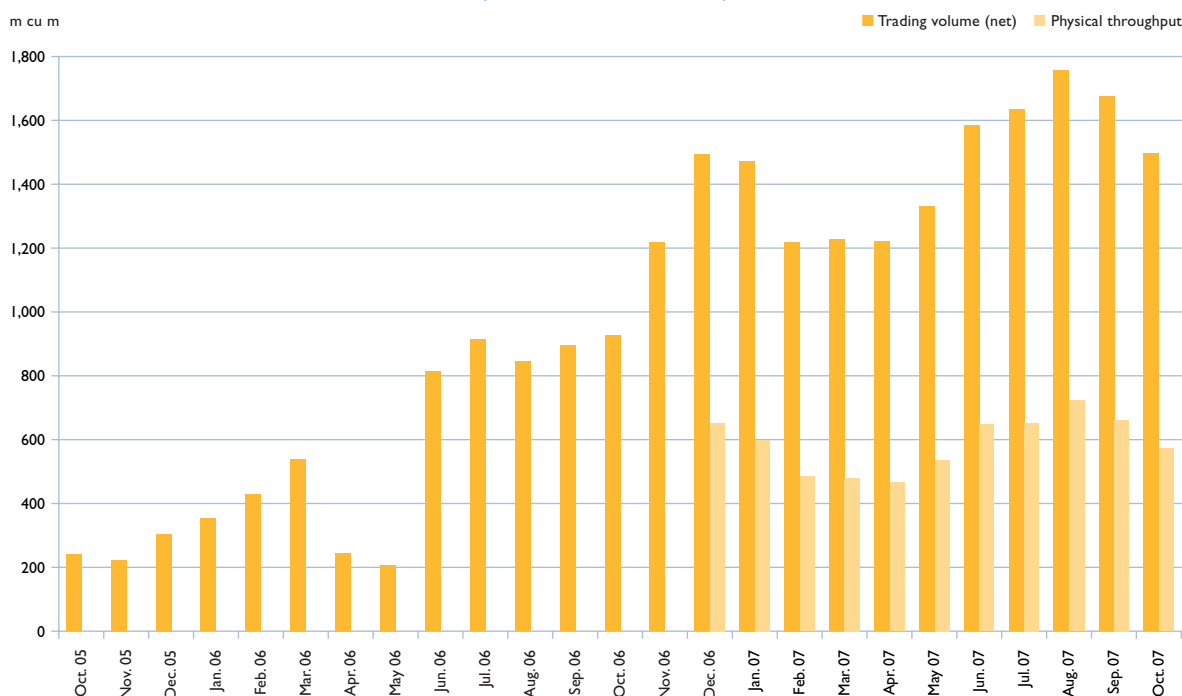
The fifth auction under the EconGas gas-release programme took place in July 2007. Rights to EconGas supply contracts were sold in an online auction run by CEGH. Some 250 cu m of gas, divided into 25 lots of equal size, was offered in an ascending clock auction. Interest in the auction

once again increased, and a total of 35 bidders from eight countries took part.<sup>16</sup> There were five successful bidders, from Italy, Switzerland and the United Kingdom. According to press reports, the starting price<sup>17</sup> was €21.75/MWh and the final price was €23/MWh. There were no Austrian gas traders among the winning bidders, and there was thus little direct impact on the liquidity of the domestic gas market.

The commitment to mount a gas-release programme was linked to the objective of developing the Baumgarten interconnection point into a trading hub. OMV formed a subsidiary, today called the Central European Gas Hub GmbH, for this purpose in 2002. The merger parties undertook to hold annual auctions of gas for delivery

## → Turnover on the CEGH market (since October 2005)

Chart 26



Source: CEGH

<sup>16</sup> See Energate, 4 July 2007: Eongas auktioniert Gas in Baumgarten (EconGas auctions gas at Baumgarten), [www.energate.de](http://www.energate.de).

<sup>17</sup> See Energate, 4 July 2007: Eongas auktioniert Gas in Baumgarten (EconGas auctions gas at Baumgarten), [www.energate.de](http://www.energate.de)

at the Baumgarten hub, to be run by CEGH.<sup>18</sup> The auction rules were developed by CEGH. EconGas' duty to hold the auctions will lapse when a functioning gas-trading hub is established.<sup>19</sup>

The interim report of the gas industry investigation, published in September 2005<sup>20</sup> criticised the lack of arrangements for the standardisation of trading at the Baumgarten hub and the high transaction costs imposed on traders by the intransparency of the market. CEGH has made progress towards developing Baumgarten into a functioning market since October 2005. It has widened the range of services offered, improved transparency by publishing information on turnover and lists of traders, and introduced an online bulletin board. Further action, including the publication of price indices, is planned.

Trading at Baumgarten has grown markedly in the past few years. During the 2006/2007 gas year, physical throughput volume (gas deliveries to contractual partners) was 5.9 bn cu m, and trading volume (title transfers) was 16.8 bn cu m – well up on turnover in the 2005/2006 gas year (Chart 26). As of October 2007 there were 58 registered members, of which 44 were active traders.<sup>21</sup> Of the latter, ten were also operating on the Austrian retail market.

### Regulation of storage facilities

Alongside the existing storage-system operators – OMV Gas GmbH and RAG AG – OOO Gazprom Export and Wingas GmbH began offering storage services in 2007, and are thus now subject to regulation by E-Control. Gazprom Export and Wingas have acquired rights to use the Haidach storage facility, commissioned in May 2007. The concession holder (AGS concession) is the builder-operator of the facility, RAG AG. The Haidach storage facility does not yet have a

pipeline connection with an Austrian control area. Wingas offers access to its storage capacity in accordance with the current legal requirements for storage undertakings (sections 39–39d Natural Gas Act). In October 2007, OOO Gazprom Export applied to the E-Control Commission for an exemption under section 20a Natural Gas Act for its share of the storage capacity; the proceeding is pending.

E-Control's regulatory responsibilities in respect of the storage market are derived from the Natural Gas (Amendment) Act 2002 – chiefly sections 39, 39a and 39b – and the commitments made in connection with the EconGas merger proceeding, as well as the EU Acceleration Directive. The Natural Gas (Amendment) Act 2002 requires storage undertakings to give eligible customers access to storage capacity at transparent and non-discriminatory terms (section 39[1]). The storage charges are not regulated, but are subject to a limit. If this is transgressed the E-Control Commission may intervene in pricing on the storage market and determine the cost components (under section 39[1] Natural Gas Act) on which the storage companies' rates are to be based by notice.

Section 39b Natural Gas Act imposes a duty on storage undertakings to submit storage contracts to E-Control as soon as they are concluded, so as to enable the regulator to ascertain whether access to storage capacity is being granted on a non-discriminatory basis. In 2007 the Austrian storage undertakings submitted all the contracts concluded.

The amended Natural Gas Act incorporated in the Energy Security of Supply Act 2006 created additional regulatory duties at national level. These include monitoring compliance with the requirements for the contents and publication

<sup>18</sup> See Zusammenschluss OMV/EnergieAllianz/OÖF – „ECONGAS“, Zusagen der beteiligten Unternehmen (OMV/EnergieAllianz/OÖF merger – “EconGas”, commitments by the merger parties), 9 October 2002, on the Federal Competition Authority website: <http://www.bwb.gv.at/NR/rdonlyres/E8A4C416-2B88-475E-B38E-628D1FB9884C/0/zusecong.htm>, Clause 2 Gas Release (German only).

<sup>19</sup> See Zusammenschluss OMV/EnergieAllianz/OÖF – „ECONGAS“, Zusagen der beteiligten Unternehmen (OMV/EnergieAllianz/OÖF merger – “EconGas”, commitments by the merger parties), 9 October 2002, on the Federal Competition Authority website: <http://www.bwb.gv.at/NR/rdonlyres/E8A4C416-2B88-475E-B38E-628D1FB9884C/0/zusecong.htm>, Clause 2 Gas Release (German only).

<sup>20</sup> <http://www.bwb.gv.at/BWB/Aktuell/Archiv2005/1zbgas.htm> (German only).

<sup>21</sup> See the CEGH website ([www.gashub.at](http://www.gashub.at)).

of the general terms and conditions of storage companies, and with the duty to post injection and withdrawal capacity and available storage capacity on the internet at regular intervals. OMV Gas, RAG AG and Wingas GmbH have posted their general terms and conditions of access to storage facilities on their websites, and OOO Gazprom Export has announced its intention to do so.

Transparent and non-discriminatory access is one of the main regulatory issues related to gas storage. At European level this is underpinned by the Guidelines for Good Practice for Storage System Operators (GGPSSO),<sup>22</sup> which were adopted at a Madrid Process mini-forum held in Brussels in March 2005 and entered into force on 1 April 2005. The GGPSSO are a voluntary agreement between storage operators and regulators.<sup>23</sup>

In our view, non-discriminatory and transparent allocation of storage capacity in accordance with section 39(1) Natural Gas Act means giving all eligible customers the same information on storage availabilities and the expansion of storage capacity at the same time. This process should be trackable. OMV Gas uses its Online Capacity Booking System to allocate storage capacity. RAG and Wingas have posted inquiry forms that are part of their allocation processes on their websites. All the storage companies allocate capacity on a first-come, first-served basis. Decisions to build new storage facilities should be based on transparent market-research surveys.

#### Applications for exemptions for gas infrastructure projects

Since the entry into force of the Natural Gas (Amendment) Act in 2006 the E-Control Commission has been responsible for ruling on applications for section 20a exemptions from certain areas of the regulatory regime (e.g. regulation of third-party access to infrastructure and of use of system charges) for major new infrastructure.

New infrastructure in the meaning of section 6(39) Natural Gas Act comprises cross-border transmission systems and storage facilities. In 2007, applications were submitted to the E-Control Commission for exemption of the Nabucco pipeline and the Haidach gas storage facility.

#### *Nabucco pipeline*

Nabucco Gas Pipeline International GmbH sought an exemption for this new pipeline from eastern Turkey to Baumgarten in Austria from certain provisions of Austrian gas legislation and a long-term guarantee of a stable regulatory framework. In particular, the company wishes this guarantee to govern the method of allocating transport capacity, thereby ensuring that it is possible to raise the €5 bn in finance required for the project.

Commissioning of the first phase of the project, scheduled for 2012, will link European markets with the large natural-gas reserves in the Caspian, close to Turkey, and the Middle East and North Africa. The new pipeline, with an annual capacity rising to 31 bn cu m on completion, will pass through the territory of the five Nabucco countries – Turkey, Bulgaria, Romania, Hungary and Austria – on its way to the Baumgarten gas hub. The entire capacity of the pipeline is to be marketed by Vienna-based Nabucco Gas Pipeline International GmbH, in which Turkey's Botaş Petroleum Pipeline Corporation, Bulgarian pipeline operator Bulgargaz-Holding EAD, Romanian transmission-system operator Transgaz S.A., Hungary's MOL Plc. and Austria's OMV Gas International GmbH are equal partners.

The E-Control Commission granted Nabucco Gas Pipeline International GmbH an exemption for the Austrian section of the pipeline, subject to certain safeguards, under a notice issued on 24 October 2007. This decision, which establishes the regulatory framework for the pipeline for a 25-year period, is conditional on:

<sup>22</sup> Posted on [www.energy-regulators.eu](http://www.energy-regulators.eu).

<sup>23</sup> The central provisions relate to the unbundling of storage operations from other parts of the business, the offer of certain storage services (unbundled and bundled), capacity allocation and congestion management, transparency requirements and secondary market rules. The European association of storage and system operators, Gas Infrastructure Europe (GIE), and its members strongly recommend compliance.

- A “one-stop shop” for system access from eastern Turkey through to Baumgarten, enabling shippers to carry gas across the five Nabucco countries under single contracts;
- An open-season tender for the capacity in order to ascertain actual capacity requirements, and an undertaking to develop sufficient capacity to meet the notified requirements;
- An undertaking to offer at least 10% of the capacity of the pipeline under short-term transportation contracts;
- Arrangements for the reallocation of unused capacity and the establishment of a trading platform for the secondary market;
- Approval of the general terms and conditions of transportation by the regulator;
- Revision of the tariff-setting methods approved under the E-Control Commission notice 20 years after commissioning if the charges are 10% higher than those of comparable systems; and
- An undertaking from the management of Nabucco Gas Pipeline International GmbH not to be influenced by its owners’ interests in its decision making.

In order to reach the decision it was necessary to analyse the impact on competition and security of supply. The findings were as follows:

- The competition analysis performed yielded the conclusion that – even in a worst-case scenario in which the supplier country with the highest market share in the EU used its entire capacity – the planned capacity-allocation mechanisms, the offer of short-term capacity rights and the obligation to expand capacity in accordance with demand would be sufficient for the project to have a positive effect on competition in all markets along the supply chain.
- Diversification of the gas-supply sources open to the European market is crucial to long-term security of supply, and gas production and the remaining reserves will increasingly be

concentrated in regions outside the EU over the next few decades. Gaining access to new gas-supply sources in the Caspian, the Middle East and North Africa by developing transportation infrastructure based on the Nabucco pipeline can thus make a major contribution to Europe’s long-term security of supply.

In order to achieve largely uniform exemptions for the entire Nabucco pipeline, the E-Control decision was made in close consultation with the regulatory authorities concerned in Bulgaria, Hungary, Romania and Turkey. The E-Control Commission notice was forwarded to the European Commission near the end of October 2007, and the latter has until the start of February to approve the notice.

#### *Haidach gas-storage facility*

The Haidach gas-storage project involves the use of the depleted Haidach gas field, on the border between Upper Austria and Salzburg, as a pore storage facility. The project is being executed in two stages, each with a working gas volume of 1.2 bn cu m, and maximum injection and withdrawal capacities of 500,000 cu m/h. The first phase entered service in July 2007, and the second phase is due for completion in mid-2011. RAG is the builder-operator of the storage facility. OOO Gazprom Export holds two-thirds of the rights to use the capacity, and Wingas GmbH one-third; both are active as storage companies.

While Wingas is marketing its storage capacity in accordance with the current legal requirements for storage undertakings (sections 39–39d Natural Gas Act), in October 2007 OOO Gazprom Export applied to the E-Control Commission for a section 20a exemption for its share of the capacity from the provisions of the Act governing storage access (section 39) and storage charges (section 39a). The application is pending.



### → Statistical activities

Pursuant to its statistical duties in respect of the natural-gas sector, set out in section 59 Natural Gas Act (BGBl. I No. 1021/2000 as amended by BGBl. I No. 106/2006), E-Control carried out statistical surveys for the 2006 and 2007 calendar years, processed and analysed the data, and published the results.

In addition, we fulfilled international reporting duties which primarily relate to the European Union.

### Price surveys

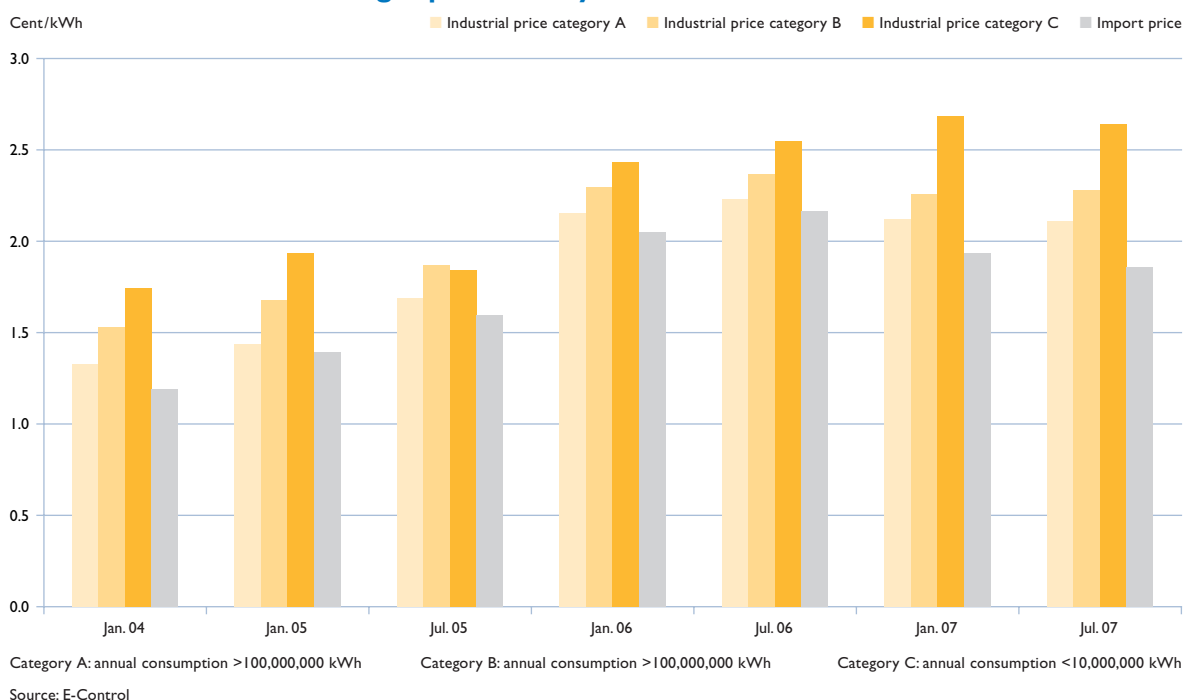
Section 9(1)(3) Energy Regulatory Authorities Act requires E-Control to prepare and publish natural-gas price comparisons for consumers.

#### *Industrial gas price survey*

Since the first half of 2004 E-Control has been surveying the energy prices paid by Austrian industrial consumers directly, on a biannual basis (January and July). The results are posted on our website ([www.e-control.at](http://www.e-control.at)). They show an upward trend in gas prices from 2004–2006

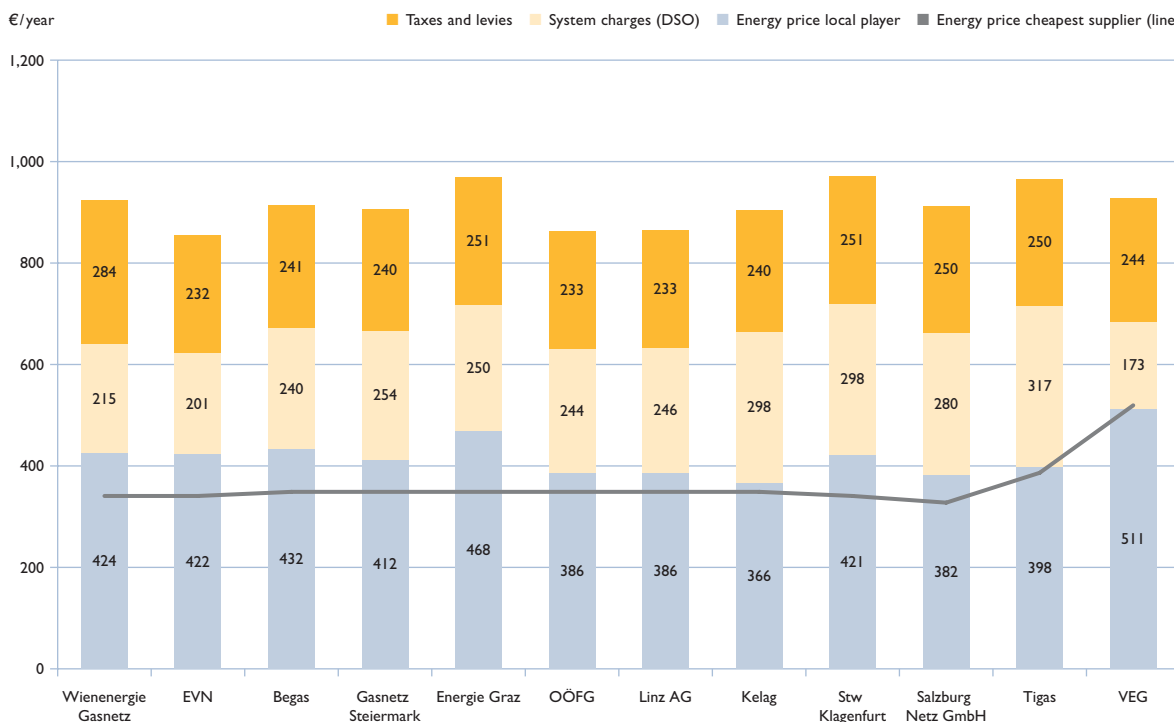
### → Results of the industrial gas price survey

Chart 27



→ Overall natural-gas price comparison for a typical small consumer  
Annual consumption of 15,000 kWh, by grid areas

Chart 28



Source: E-Control, status as of December 2007

(Chart 27), followed by a decrease for two groups of industrial consumers. Industrial gas prices are mainly driven by import prices, due to the fact that the latter are generally built into price formulas in the supply contracts.

*Tariff calculator analysis: domestic gas prices*

The tariff calculator on the E-Control website allows consumers to find the cheapest gas supplier by inputting their postcode and annual consumption. They are first shown the suppliers, listed in ascending order by total price. Different views

can be selected for rebates (with all rebates, all general rebates, or no rebates deducted).

The detail view displays the composition of the tariff selected. The total price is broken down into the energy price – the component open to competitive influences – system charges, levies and taxes.

The prices shown on the tariff calculator are those valid at the time, and adjustments for changes in supplier prices are not made until they come into effect.



## Activities at national level

### → Responsibilities common to electricity and gas

#### → Emergency intervention measures

#### Activities under the Energy Intervention Powers Act 1982

The Energy Security of Supply Act 2006 (BGBl. I No. 106/2006) amended the Energy Intervention Powers Act 1982.

The main purpose of the amendments to the Energy Intervention Powers Act 1982 was to harmonise the emergency legislation governing the two network energy industries, natural gas and electricity, and the related powers, as well as adding the operation of an early warning system (monitoring) to the statutory duties of E-Control and other parties.

This resulted in the following significant changes in our emergency preparedness activities:

- New responsibilities with regard to the management of natural-gas resources;
- (Early warning) monitoring of conditions in both the electricity and the gas sectors, and related reporting duties; and
- Collection of a wider range of electricity data to assist in the preparation of intervention measures.

Our key emergency preparedness activities are “the preparation and coordination of the measures to be taken in the Austrian control areas in case of need” in order to safeguard electricity and natural-gas supplies.

The regulator is required to draw up appropriate regulations to this end in close collaboration with the control-area managers and in consultation with the Ministry of Economic Affairs and Labour. These are to be discussed with the system operators and market participants concerned, and – in the case of the electricity sector –

the provincial governors, who are responsible for compliance with the provincial consumption quotas, and to be adjusted to current requirements as necessary.

The increased need for information for emergency response purposes necessitated amendments to the Energielenkungsdaten-Verordnung (Energy Intervention Data Order) 2001/02 (electricity), as well as definition of the scope of the gas data required.

The Electricity and Natural Gas Intervention Data Orders 2006 were published on 28 December 2006 in issue No. 250 of the Official Gazette supplement of Wiener Zeitung and entered into effect on 1 January 2007.

It was not possible to conduct all of the new surveys stipulated by the two intervention data orders immediately due to the new or extended reporting requirements, and in some cases, the inclusion of new respondents. Because of this, transitional arrangements for the early-warning data were written into the orders, and the reporting duties and survey mechanisms were adjusted to the capabilities of respondents, E-Control and the control-area managers.

In the gas sector, the manager of the Eastern control area, AGGM is responsible under section 4 Natural Gas Intervention Data Order 2006 for the collection and initial processing of forecasting data. An early-warning mechanism adapted to the special conditions in Tyrol and Vorarlberg has been worked out in consultation with the respective control-area managers and system operators; this has not yet been implemented in full.

In the electricity sector, section 5 Electricity Intervention Data Order 2006 requires the separate transmission of the forecasting data to

the control-area managers and E-Control. Data processing and analysis are thus also separate. The reasons for these redundant processes are the use of some contractual data for emergency intervention purposes, and the resultant importance of keeping the data and functions separate, as well as the large number of respondents and the special requirements in terms of data availability and communications in an emergency.

Starting with the forecasting data, and current information on the operational environment, such as storage and production rates, fuel stocks and power station availability, the control-area managers and E-Control are building up reporting systems tailored to their respective needs. The reports are aligned with each other by working groups which also deal with other aspects of emergency preparedness.

At the same time the incoming data is analysed from a variety of perspectives, and its reliability and suitability for the tasks at hand – especially providing early warnings of emergencies – are verified. During the consultation on the 2006 energy intervention data orders we offered to validate the survey data, and a related report is planned for the second half of 2008.

Besides the monitoring data laid down by the 2006 orders, we also collect other information about the operational environment, to help us to anticipate crises in the making. At present this largely concerns temperature and weather data, as weather conditions have a direct, short-term influence on supply and demand. However, this extended monitoring also includes gathering information on world energy markets, such as spot prices, so as to assess longer-term trends.

Information exchanges with the Austrian control-area managers on conditions on their networks and the international transmission grid, and

action to open up additional official information channels are also under discussion.

We evaluate our early-warning information requirements on an ongoing basis, and wherever possible make adjustments as the need arises.

#### Priorities in 2007: electricity

In performance of our duties under the Energy Intervention Powers Act 1982, during the 2007 calendar year we focused on the following activities relating to the electricity sector:

- Conduct of surveys under the Electricity Intervention Data Order 2006 and the creation of a new database;
- First steps towards setting up an early-warning system;
- Preparatory work to develop intervention measures under section 10 Energy Intervention Powers Act 1982;
- Drafting of an order introducing intervention measures to safeguard electricity supplies (standby legislation);
- Design of mechanisms for the coordination and operational implementation of emergency measures (“organisation manual”).

The various tasks involved were discussed, proposed solutions worked out and related documentation prepared in close collaboration with the control-area managers, who would be responsible for executing the measures in the event of an emergency. We also kept representatives of the provincial governors – who would have a particularly active role to play in connection with the provincial consumption quotas – up to date with the progress of the work and the discussions.

We liaised with the Ministry of Economic Affairs and Labour on the crisis mechanisms and processes developed, and further action.

### Priorities in 2007: natural gas

The Energy Intervention Powers Act 1982 assigns the same areas of responsibility to E-Control in the natural-gas and electricity sectors.

We see the coordination of all activities related to emergency intervention in the two network energy industries as one of our key tasks.

The priorities for action in 2007 were therefore the same in the gas as in the electricity sector. On the data side, the focus was on implementing the Natural Gas Intervention Data Order 2006, and setting up a database and a reporting system. The administrative duties centred on formulating intervention measures and the related order, and creating mechanisms for the implementation of emergency responses in the event of a crisis.

In the gas sector, too, the various activities were carried out in close cooperation with the control-area managers. Separate mechanisms were developed for the Tyrol and Vorarlberg control areas, where conditions are different.

The emergency mechanisms and processes are coordinated with the Ministry of Economic Affairs and Labour on an ongoing basis.

#### → Market abuse proceedings

E-Control's market monitoring and oversight responsibilities include acting to prevent discriminatory treatment of market participants – particularly by monopolists (system operators). If E-Control detects abuse it is required to take all necessary steps to restore compliance with the law without delay.

In 2007 there was a marked reduction in the number of market-abuse proceedings compared with previous years. Proceedings during the year under review concerned supplier switches,

applications for new connections, and power-of-attorney problems in connection with supplier switches. Some of the issues typically dealt with in abuse proceedings in the past have tended to go to arbitration.

On the whole, the current trend is encouraging since it indicates that market participants by and large adhere to the market rules and breaches are more the exception than the rule. Furthermore, companies are now far more flexible in the positions they take and more willing than before to cease behaving abusively. However, where undertakings abuse their position it will continue to be necessary to take vigorous action to put an end to such practices.

In most cases, on learning of malpractice E-Control staff have been able to deal quickly with grey areas regarding the applicability of legal principles without initiating proceedings, thus enabling market participants to achieve compliance. This has helped to keep down the number of proceedings.

There have also been instances of suspected irregularities that have emerged during arbitration hearings being more closely investigated in abuse proceedings. An example of this was proceedings initiated at the end of 2007 which related to a system operator using the system-admission charge to pass on upstream medium-voltage grid costs to customers.

A case concerning the gas sector, brought in 2007, arose from the oversight of the allocation of storage capacity. Eight other cases were brought to clarify whether formal abuse proceedings should be opened. These related to compliance with the transparency requirements for transmission-system operators, and to ensuring that system operators fulfil their duty to publish newly approved terms and conditions of system access, and to apply the latter.

## → End-user services

### Focus of end-user activities at E-Control

A new Consumer Affairs Department was set up at E-Control in September 2007. The department's function is to keep an overview of national and international issues of importance to private consumers and small businesses, so as to identify and subsequently implement necessary measures. In particular, the department deals with the following areas: the supplier switching process; analysis of customer inquiries; activities aimed at stimulating competition; and the education of consumers on the functions and opportunities of the liberalised electricity and gas markets. This strong focus on end-user activities will enable us to design our internal processes well and target key issues effectively.

The number of customer enquiries received via the consumer hotline and by e-mail or post is constantly growing. This is due in part to E-Control's own activities: for example, consumers react to press reports, advertisements and appearances at trade fairs. Increased attention also reflects rising energy prices, which suppliers must notify to consumers in advance. The new Consumer Affairs department is tasked with meeting the resultant demand for explanation and information. Targeted consumer education – particularly on the rights and the opportunities offered by liberalised electricity and gas markets – should lead to an overall strengthening of end-users' position.

### Competition stimulation package

As part of the Federal Competition Authority's general investigation of the Austrian electricity industry, intensive discussions were held in 2005 and 2006 about potential measures to stimulate competition on the Austrian electricity market.

In 2006 these talks, between the Federal Competition Authority, E-Control and the Austrian Association of Electricity Companies, led to the agreement of a competition stimulation package. The package represents a voluntary commitment by the electricity companies and is designed to improve the position of consumers in the liberalised electricity market, create a level playing field for all market participants and remove barriers to entry.

Although the electricity companies rejected many of the authorities' proposals, and the scope of the stimulation package was narrower than originally hoped, it was nevertheless possible to reach agreement on significant improvements in some areas, including the following measures:

- Non-discriminatory treatment of suppliers by system operators with regard to the electronic transmission of system-charges billing data;
- Shortening of the overall supplier switching process from eight to six weeks;
- An end to dubious price adjustments under all-inclusive agreements;
- A code of conduct for suppliers; and
- A factsheet for consumers.

New regulations governing matters including the transparency of contracts, bills, and information and advertising materials were also introduced by the Energy Security of Supply Act 2006, which came into effect on 1 January 2007. All the actions under the competition stimulation package were to be implemented by 2007 at the latest. The Association of Austrian Electricity Companies was charged by the Federal Competition Authority and E-Control with monitoring the status of implementation and compliance with the package and submitting a related report.

The latter, and information gained from E-Control's general market oversight activities, indicate that some of the measures contained

in the package have brought genuine benefits. In particular, the shorter supplier switching process, which E-Control has incorporated in the current market rules, is now being applied throughout Austria. Most electricity suppliers have also distributed the first factsheet to all of their customers. Consumers will also receive a copy of the factsheet from their system operator when concluding a system-access agreement, which is required for new connections or when moving home. However, the monitoring by the Association of Austrian Electricity Companies and E-Control's own arbitration work have shown that there is still much to be done – notably with regard to the design of invoices.

Many electricity companies continue to send their customers bills that do not fulfil the minimum statutory requirements in terms of their contents or transparency. It will therefore be necessary for E-Control to take further action on this issue.

In 2007 a regulatory framework was established for the non-discriminatory treatment of all suppliers with regard to the electronic transmission of system-charges billing data. Related market rules, based on a proposal from the Association of Austrian Electricity Companies, came into force during the year. These oblige system operators with more than 100,000 customers to create the conditions for suppliers to provide system-charges billing data in a standardised electronic format by November 2007. This form of data transmission brings significant cost and labour savings for suppliers that present consumers with all-in bills including the system charges. It removes the need for printed paper bills and manual entry of the data contained in them into the suppliers' IT systems. This results in quicker and more efficient billing processes, and hence in direct benefits for consumers. However, not all system operators met the implementation deadline, and there were also widespread delays in compliance by suppliers.

We have begun evaluating compliance in order to make any amendments to the relevant regulations that are needed in good time, so as to help achieve blanket implementation by all the smaller system operators, which is scheduled for November 2008.

### General delivery terms

The Energy Security of Supply Act 2006 brought about important changes in the general terms and conditions for the supply of electricity and gas. Under the new legislation, suppliers are for the first time obliged to draw up general terms and conditions (GTC) for the supply of electricity to non-load-profile metered consumers, and to notify the E-Control Commission electronically of any amendments to their GTC before they come into effect. The changes must also be published in an appropriate form (section 45b[1] Electricity [Amendment] Act). Similar requirements for gas suppliers are contained in section 40(3) Natural Gas (Amendment) Act.

In addition, section 40(6) Natural Gas (Amendment) Act empowers the E-Control Commission to prohibit the use of delivery terms within two months of submission if they are illegal or unethical. The Electricity (Amendment) Act does not contain a comparable provision, but the Energy Regulatory Authorities (Amendment) Act confers a general power on the Commission to ban the application to consumers of any terms and conditions that infringe legal prohibitions or conflict with ethical business practices (section 16[1][3]). In contrast to the general terms and conditions of distribution networks, this does not concern the approval of GTC, but rather a duty of notification, which may result in their rejection by the Commission. The provisions of the Consumer Protection Act and the Austrian General Civil Code are not affected (section 45b[5] Electricity [Amendment] Act and section 40[7] Natural Gas [Amendment] Act).

Following the amendments introduced by the Energy Security of Supply Act 2006, the Electricity (Amendment) Act and Natural Gas (Amendment) Act now contain minimum requirements for the contents of general delivery terms and contract forms. These include the name and address of the supplier, the anticipated time of the commencement of supplies, the term of the contract, the right to withdraw from the agreement, and information on complaint procedures (section 45b[3] Electricity [Amendment] Act and section 40[5] Natural Gas [Amendment] Act).

It should be noted here that the above provisions of the Natural Gas (Amendment) Act came into effect on 1 January 2007. However, the relevant provisions of the Electricity (Amendment) Act are framework provisions, meaning that provincial implementing legislation is required. Section 71(6c) Electricity (Amendment) Act allows six months for implementation, and this deadline expired at the end of 2006. As of January 2008 some of the provincial implementing legislation had not yet been passed.

At the start of December 2006, we wrote to all gas suppliers operating in Austria on behalf of the E-Control Commission to inform them of the new notification requirements for terms and conditions, and to request timely submission. By January 2008 a total of 17 notifications had been received from natural-gas suppliers, and in these cases proceedings have been dropped. However the notifications from some municipal utilities are still outstanding.

Some 66 submissions have been received from electricity suppliers, and proceedings in these cases have also been closed. Notifications are still to be received from one provincial utility, some large municipal utilities and many small

utilities. As the enactment of provincial implementing legislation has not yet been completed, an end to the notification process cannot be expected in the near future.

In the run-up to the notification process and during it, detailed discussions were held between representatives of the regulator acting on behalf of the E-Control Commission and energy suppliers. The main yardsticks for the E-Control Commission are the provisions of the Electricity and Natural Gas (Amendment) Acts regarding the minimum contents, and the relevant provisions of the Consumer Protection Act. Amendments or additions to the delivery terms by suppliers during the submission process resulted in substantial improvements, and so far no notices prohibiting the use of GTC have been issued.

#### Basic electricity supply

Section 44a Electricity (Amendment) Act for the first time establishes an obligation to provide domestic consumers with a basic supply of electricity. The conditions under which such “last-resort supplies” are to be provided must be set out in the delivery terms of the respective supplier. The detailed provisions with regard to the reasonableness of basic supply and the tariffs must be established by implementing legislation at provincial level.

#### Activities of the consumer advice unit

In its fifth year of operation the dispute settlement board service again showed its worth as a contact point for consumers. Apart from conducting arbitration procedures under section 10a Energy Regulatory Authorities Act – disputes arising from electricity and gas bills, and network connection issues were particularly frequent –



during the year under review the arbitration service fielded many inquiries from consumers wanting bills checked or seeking general information about the liberalised electricity and gas markets.

All that is needed for the arbitration service to swing into action is an informal written application (by letter, fax or e-mail), briefly outlining the events in question and enclosing the relevant documentation. Complaints about events going back further than four years before the application or charges that were due before the cut-off date are ineligible. The same applies to disputes concerning pending claims on which courts or administrative tribunals have already ruled or which are already the subject of an arbitration procedure.

Since its establishment the arbitration panel has handled a total of 846 cases, including 156 in 2007.

This represents a decline in the number of cases compared to the previous year. The arbitration service attributes this mainly to the fact that, thanks to the experience that it has accumulated, some problems can be resolved at once or after a brief discussion with the company concerned. Many inquiries are similar to cases which have already been dealt with, meaning that they can be resolved quickly without the need to instigate formal procedures. Here, the company concerned is usually asked for information about the case in question by e-mail or telephone, and the customer informed of the response. Although not all inquiries led to the initiation of formal procedures this did not influence the results. Where a company had made a mistake the customer was offered the same solution as would have emerged from an official arbitration procedure.

The issues involved in arbitration procedures and the reasons for complaints remained much the same as the year before. The most prevalent cause of complaints in 2007 was energy bills (35%), followed by unexpected increases in consumption (28%), network connections (17%), and problems with supplier switches and tariff changes (15%). Other types of inquiries accounted for 5% of all complaints.

Further information on the activities of the arbitration panel is provided by its report for 2007.

### E-Control's public-information activities

#### *Talks and publications by E-Control staff*

In 2007 E-Control's experts continued their efforts to provide consumers and market participants with relevant, up-to-date information on energy market developments. To this end E-Control staff members addressed some 100 domestic and international meetings and conferences. E-Control employees also contributed to specialist Austrian and international journals.

#### *Media-relations work in 2007*

E-Control also gave high priority to public-relations activities in 2007. Conventional press-relations work included the organisation of numerous press conferences, energy round-table discussions and background briefings. Journalists were also informed about current developments by means of press releases and one-on-one interviews. We responded to the growth in public interest following the 2007 round of price increases by stepping up our information activities – for example by holding information events and mounting advertising campaigns.

Redesign of the tariff calculator

The redesign of the tariff calculator, which now features a new user interface and some adjustments to the quick-check energy efficiency calculator, is aimed at easier navigation and greater user-friendliness (Chart 29). Some query pages have been combined and restructured, while im-

provements have also been made to the printing function, which now works directly from HTML pages. Supplier contact details are also provided in the overview and can be included in printouts. The Austrian power labelling system<sup>24</sup> stands out for its strict rules on the issue and use of guarantees of origin. In addition to the composition of the energy mix, other details such

→ Redesigned tariff calculator

Chart 29



Source: E-Control

24 Section 45 (2 to 4) and section 45a Electricity Act

→ **Tariff calculator: environmental impacts of electricity production** Chart 30

**Stromkennzeichnung:** Unternehmensmix im Zeitraum von 01.01.2006 bis 31.12.2006 gem §45 Abs 2 und §45a EEWOG

<b>Erneuerbare Energie</b>		<b>23,00 %</b>
Biogas	0,64%	
Deponie- und Klärgas	0,10%	
Sonnenenergie	0,02%	
Wasserkraft	3,20%	
Windenergie	3,08%	
feste oder flüssige Biomasse	2,09%	
geothermische Energie	0,01%	
UCTE-Anteil erneuerbare Energie	13,86%	
<b>Fossile Energie</b>		<b>48,76 %</b>
UCTE-Anteil fossile Energie	48,76%	
<b>Nukleare Energie</b>		<b>28,24 %</b>
UCTE-Anteil nukleare Energie	28,24%	
<b>Umweltauswirkungen der Stromproduktion</b>		
CO <sub>2</sub> -Emissionen	403 g/kWh	
Radioaktiver Abfall	0,000756 g/kWh	

Source: E-Control

as environmental impacts (CO<sub>2</sub> and radioactive waste) must be displayed on bills and advertising materials. This requirement is also reflected in the tariff calculator. Since May 2007, besides supplier's labelling, the environmental impacts of the form of electricity generation have also been included in the detail view of the tariffs (Chart 30).

Previously it was not possible to link payment methods and intervals directly. This resulted in difficulties for users in understanding which payment intervals were related to a given payment method. Following the changes to the calculator, from the beginning of 2007 suppliers have been able to show which combinations of payment intervals and methods are applicable. The additional information provided in the detail view includes the possible combinations found in the tariff calculator (Chart 31).

→ **Tariff calculator: payment methods and intervals** Chart 31

<b>Relevante Zusatzinformation zu diesem Tarif</b>	
Gültigkeitsbeginn	<b>01.01.2008</b>
Gültigkeitsende	<b>bis auf Widerruf</b>
Bindefrist/Datum	<b>keine</b>
Zahlungsarten / Zahlungsintervalle	<b>Abbuchungsauftrag:</b>
	<b>Zahlschein:</b>
Kündigungsfrist	<b>1 Monat, jeweils zu Monatsende</b>

Source: E-Control

**Hotline**

E-Control runs a hotline for general consumer inquiries on 0810 10 25 54. In 2007, consumers made an average of around 700 calls per month to the hotline. These are mostly general inquiries relating to liberalisation, and concern such matters as supplier switching, price comparisons and how to obtain power generated from renewable energy sources, as well as information about individual suppliers. The number of calls to the E-Control hotline rose again in 2007, by some 70%. The demand for information tends to rise sharply whenever the energy companies announce price increases.



## Activities at national level

### → Energy efficiency activities

Energy demand has risen rapidly in recent years, and appears likely to continue to do so. The reasons for this include economic growth and rising living standards, population growth, increasing numbers of domestic appliances, and more energy-intensive leisure and consumer behaviour.

Chart 32 depicts the evolution of Austrian final energy consumption and gross domestic electricity consumption from 1990–2020. The values up to 2005 are actual statistics, and those after that year are estimates according to a variety of scenarios.

From 1990–2005 final energy consumption grew by an annual average of 2.5% (from 766 PJ

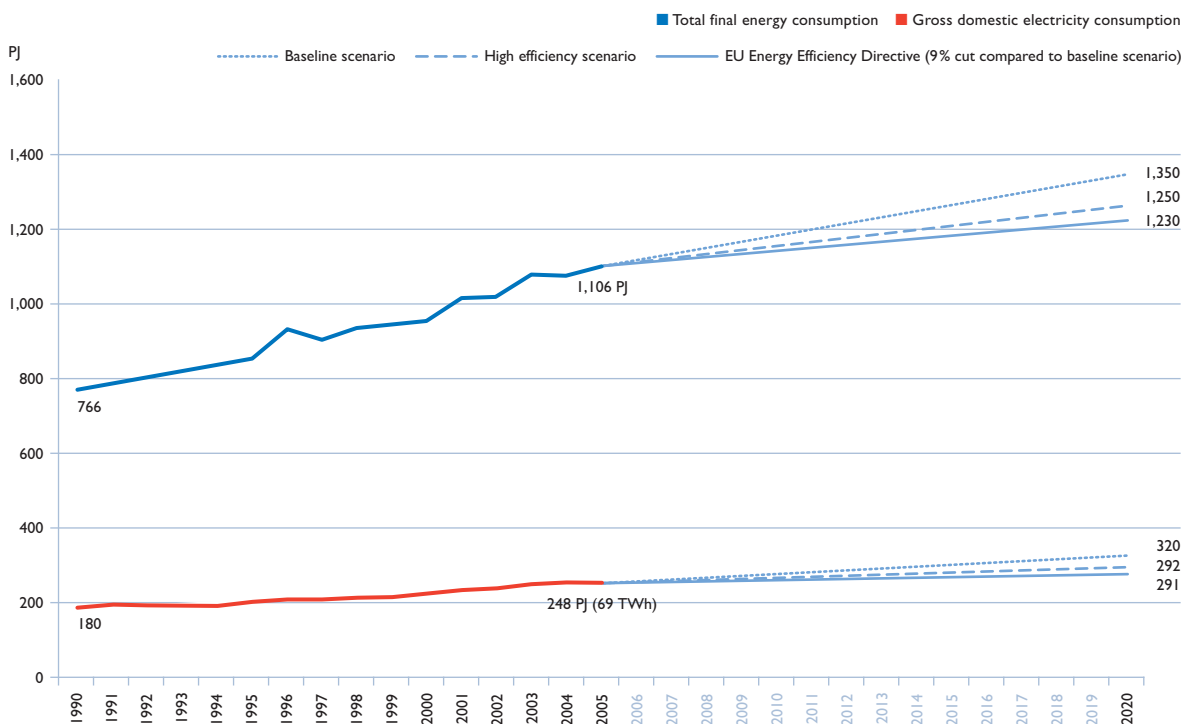
to 1,106 PJ), while electricity use rose by 2.2% per annum (from 180 PJ to 248 PJ).

Model projections by the Austrian Institute of Economic Research (study published in June 2005) show annual growth rates of 1.1% for overall energy use and over 2% for electricity demand under the baseline scenario, meaning that final energy consumption stands at 1,350 PJ and electricity use at 320 PJ in 2020.

The Institute's high-efficiency scenario cuts projected final energy consumption by 100 PJ to 1,250 PJ in 2020, as compared to the baseline scenario. This is still 13% higher than in 2005, while the reduction of just under 30 PJ in electricity consumption leaves it nearly 18% up on that year.

### → Total energy use and electricity consumption, 1990–2020

Chart 32



Sources: E-Control, Statistik Austria and WIFO

Given implementation of the EU Energy Efficiency Directive, which is aimed at a 9% cut in energy use compared to the baseline scenario, total final energy consumption is 1,230 PJ and gross domestic electricity consumption 291 PJ in 2020. This would correspond to increases of 11% in total energy use and 17% in electricity consumption from their levels in 2005.

### Energy efficiency measures

EU Directive 2006/32/EC of 5 April 2006 is aimed at improving energy end-use efficiency in member states, and has an overall energy-saving target of 9% by the ninth year of implementation. The methodology for calculating national targets is based on average energy consumption over the five-year period prior to the implementation of the directive. The target is 9% of this average (less energy consumption by installations subject to the emission allowance trading scheme). These savings can be achieved by means of measures such as those set out in Annex III of the directive, provided that they are clearly measurable and verifiable.

Member states are to establish intermediate national indicative energy-saving targets for the third year of application of the directive. These targets are to be incorporated in energy efficiency improvement programmes outlining the strategy for attaining them.

Among the measures related to electricity and gas listed in Austria's National Energy Efficiency Action Plan are:

- Real- or near real-time electricity consumption metering (smart metering);
- Use of heat pumps with high efficiency ratings;
- Avoidance of the use of inefficient central heating systems such as electrical heating, or their replacement;
- Information tools for consumers such as electricity and heating energy consumption checkers.

### Better consumer information

One of the main thrusts of the Energy Efficiency Directive is better consumer information. Measures such as individual meters that accurately

### → “Quick Check” energy efficiency calculator

Chart 33



Source: E-Control

## → “Profi-Check” energy efficiency calculator

Chart 34



Source: E-Control

reflect the final customer's actual energy consumption and informative billing are intended to make consumers aware of how they can control their energy consumption and improve its efficiency in the long term.

Informing consumers is also a core responsibility of the public sector. E-Control has developed two energy efficiency calculators – the “Quick Check” (in 2006) and “Profi-Check” – in cooperation with the Austrian Energy Agency.

On the basis of the appliances selected by the user, these tools show the absolute and percentage energy savings to be made by using more efficient appliances. They also provide energy-saving tips.

- Energy-saving potential: Apart from a comparison with average consumption, the energy-saving potential per type of use (e.g. refrigeration) in kWh is indicated. The potential savings are priced at the local supplier's rates, so that the annual saving is calculated in euro as well as kWh.
- Energy-saving tips for all forms of consumption: These hints (on appliance standby functions and all forms of energy use including lighting) highlight simple ways of saving energy by changing one's behaviour. Advice is also given on what to look out for when buying appliances.

For consumers who are about to make purchasing decisions, there is also a link to a website ([www.topprodukte.at](http://www.topprodukte.at)) maintained by the Austrian Energy Agency, which provides information on the most energy-efficient products by category, including descriptions and prices.

The Quick-Check calculator (Chart 33) requires the user to state the number and type of various electrical appliances (e.g. 1 plasma TV and 2 desktop PCs). The system then computes the energy consumption and potential savings on the basis of average values.

The more time-consuming Profi-Check tool (Chart 34) goes into greater detail. Apart from the number, age and efficiency classes of the appliances, users are also asked about their behaviour, e.g. number of hours spent at home and number of washes at given temperatures.

#### Real- or near real-time electricity metering

The rapid development of information and telecommunication technology in recent years has not passed metering systems by. Ever-improving and cheaper electronic components have encouraged many manufacturers to start developing digital meters, which are generally referred to as “smart meters”. Unlike conventional Ferraris disc meters, these devices have no moving parts. The epithet “smart” mainly has to do with the fact that their range of functions is wider than that of a mechanical meter. There is likely to be a big changeover to smart metering technology in the next few years.

This would have a number of advantages, including real- or near real-time information on consumption, individualised tariff schemes, and faster and more accurate billing. In addition, smart metering would bring significant efficiency gains for system operators and suppliers. However,

the following preconditions must be met before the benefits can be realised:

- The development and overwhelming acceptance of common data-interface and exchange standards; without standardisation it will not be possible for consumers and the market as a whole to enjoy the advantages the technology;
- The exploitation of the potential synergies, possibly through the combined roll-out of smart electricity and gas meters;
- Increased awareness of the advantages of the new metering technology among consumers, and maximum transparency with regard to the information and data concerned (e.g. no restrictions of consumers’ access to their own data).

Under current Austrian legislation there is no compulsion to introduce smart metering systems. However, the aforementioned Energy Efficiency Directive (2006/32/EC) and the European Commission’s Third Energy Package proposals present an opportunity for mandatory nationwide introduction of the technology.

At present three Austrian system operators – Energie AG Oberösterreich Netz GmbH, Linz Stromnetz GmbH and Stadtwerke Feldkirch – are taking practical steps to address the smart-metering issue because of the potential advantages of the system. The largest ongoing project in Austria aimed at launching an innovative electronic metering system is being implemented by Energie AG Oberösterreich Netz GmbH. The company aims to replace 85% of the meters in its grid area with smart devices by 2015.

Another Upper Austrian system operator, Linz Stromnetz GmbH, also plans to use smart meters for the phased modernisation of its inventory. A pilot project involving 250 households is in progress at the Energiepark Plesching.

In addition, Stadtwerke Feldkirch intends to exchange its meters over the next few years. As a first step all new buildings, and customers whose units require recalibration will be given new smart meters. Some 3,000 mechanical meters will be replaced by the end of 2008.

Elsewhere in the EU smart meters are being introduced in a number of countries. New legislation in Italy, the Netherlands and Sweden makes nationwide roll-out of smart metering systems mandatory.

E-Control favours the introduction of smart metering systems in principle. In response to the growing interest in the issue, the projects being undertaken by Austrian system operators, and

the roll-out of intelligent metering systems in some other European countries, E-Control published a consultation paper entitled "Einführung innovativer Messsysteme in Österreich" (The Introduction of Innovative Metering Systems in Austria) in April 2007. We invited all market participants, and in particular Austrian system operators and suppliers, as well as energy service providers, appliance manufacturers and consumers, to take part in the subsequent public consultation.

We are also continuing to monitor current developments relating to metering systems in Austria closely, and have therefore recently contacted the three system operators who have already launched projects to offer our support.





Activities at European level 2007



Austria is one of the main hubs for Europe's energy grids. Key gas transit pipelines that supply Western and Southern Europe pass through the country. The Austro-German border is one of the few where electricity trade does not suffer from interconnector congestion. One might think that Austria would benefit from its good access to energy sources across Europe. In reality, however, Austria's location hits it particularly hard, as market distortions in neighbouring countries make energy imports inaccessible or dearer and prevent domestic and foreign suppliers from competing on equal terms. E-Control therefore plays a highly active role in international cooperation with other regulators, so as to enable Austrian consumers to enjoy undistorted energy markets and reasonably priced supplies, and to create a level playing field for domestic energy companies.

Under section 7 (3) Energy Regulatory Authorities Act our statutory duties include taking part in cooperation aimed at further progress towards a European internal energy market. This responsibility is principally fulfilled by taking an active part in the work of the Council of European Energy Regulators (CEER) and the European Regulators' Group for Electricity and Gas (ERGEG). E-Control also cooperates with other regulators at regional level, through the Electricity and Gas Regional Initiatives.

→ Electricity sector activities

**ERGEG Electricity Regional Initiative (ERI)**

Building on the discussions held and agreements reached at the Florence Forum since 2004, and the regional "mini-fora" on congestion management in 2005, the ERGEG launched the Electricity Regional Initiative (ERI) in 2006. The ERI is a pan-European process aimed at the systematic development of regional markets. The starting point of the ERI process was the definition of seven market regions. An eighth – South-East Europe – is expected to be established in

the next few months, on the basis of the Energy Community Treaty between the EU and partner countries in South-Eastern Europe.

From the outset Austria has been a member of the Central-East regional energy market (REM), which also comprises the Czech Republic, Germany, Hungary, Poland, Slovakia and Slovenia, and the Central-East REM, to which France, Germany, Greece, Italy and Slovenia also belong. E-Control has taken on the role of coordinator of the Central-East REM. The energy ministries of the member countries of the Central-West (CWE) REM (Belgium, France, Germany, Luxembourg and the Netherlands) have initiated the Pentalateral Energy Forum process. This carries out joint and additional regional market integration activities in cooperation with the CWE region. Austria has had observer status at Pentalateral Energy Forum meetings since August 2007.

The REMs' work is organised around Implementation Groups, which discuss and execute specific projects. Market participants and interest groups are involved and kept informed by holding annual Stakeholder Group meetings ([www.energy-regulators.eu](http://www.energy-regulators.eu)).

The Italian regulator, AEEG carries out the coordination function in the Central-South region, where the work focuses on cross-border congestion management, market transparency and the regulatory authorities' powers.

In the CWE region, led by the Belgian regulator CREG, apart from the above topics the key issues are security of supply forecasting and the operational coordination of the control-area managers involved.

The Central-East European (CEE) region, led by E-Control, has set cross-border congestion management, transparency, the removal of market entry barriers and the harmonisation of regulatory powers as its priorities for the next two years.

## → The ERI market regions

Chart 35

■ Central West ■ Northern ■ France, UK & Ireland ■ South West ■ Central South ■ Central East ■ Baltic ■ Eighth region



Source: ERGEG

### Transparency

Inadequate transparency and lack of access to market information create risks for market participants which they pass on to final consumers. This results in high and intransparent prices, and market inefficiencies. ERGEG, the European Commission and market participants have therefore been paying close attention to this issue over the past three years. The impact of this work has been seen in the ERGEG Guidelines of Good

Practice for Information Management and Transparency ([www.energy-regulators.eu](http://www.energy-regulators.eu)), the Florence Forum discussions and the Transparency Working Group established during the spring of 2007.

This was the background to a public consultation held by the ERGEG CEE region in October 2007 on specific steps towards achieving compliance with the transparency requirements in the region. The requirements in question are those of the Congestion Management Guidelines under

Article 8 Regulation (EC) No 1228/2003 and the ERGEG Guidelines of Good Practice. The consultation was aimed at investigating the extent to which market participants and system operators in the CEE region are capable of providing transparent information on a voluntary basis. The findings are now available, and the initial implementation phase, taking the form of harmonised electricity market data and disclosures in the CEE region, is due for completion by March 2008. It will be vital to ensure that the basis for enhancing transparency and information management – the requirements and the road map for attaining compliance – in the CEE REM is consistent with the approach of the other ERGEG ERI regions.

#### Congestion Management Guidelines under Art. 8 Regulation (EC) No 1228/2003

During the project work on load-flow-based capacity calculation and coordinated allocation of border capacity in the CEE region, the necessary network calculations and a definitive network model were largely completed in 2007. The key organisational and antitrust issues were thoroughly examined by the end of the year. The project plan ([www.energy-regulators.eu](http://www.energy-regulators.eu)) provides for the final documentation on the new system and the future capacity-allocation system to be submitted to the CEE regulators and approved by them by the summer of 2008. A pilot operation phase is planned for the autumn, and is to be immediately followed by use of the system for actual capacity allocation by means of annual, monthly and daily auctions.

#### Market entry barriers

The European Federation of Energy Traders (EFET) presented its second report on barriers to entry in CEE countries at the third CEE Stakeholders Group Meeting on 7 November 2007.

According to the report, there have been some positive developments, but many critical problems remain, including the reintroduction of import and export fees. The CEE regulators and the European Commission have therefore agreed to set up a separate Implementation Group on entry barriers, which is to evaluate these problems and potential solutions in 2008 and draw up a detailed action plan. The participation of representatives of member states from the CEE region will be crucial, as amendments to national electricity market legislation will often be needed to achieve sustainable solutions.

#### Outlook

The Electricity Regional Initiative is continuing in 2008, and is focusing on specific actions and the attainment of planned outcomes, as well as higher-level coordination between regions.

#### EU twinning projects

In May 2007 we joined forces with partners ERO (Czech Republic) and AEEG (Italy) in the European Commission's Regulatory and Legal Capacity Strengthening of Energy Regulation in NERC twinning project, which is assisting the Ukrainian regulator, NERC. The project has six main components, on which experts from the three project partners are giving presentations and holding workshops in Kiev.

During the first three quarters the emphasis was on providing support, under E-Control's guidance, on the harmonisation of Ukrainian with EU energy legislation and the establishment of a system for monitoring the wholesale energy market. Other workshops were devoted to incentive regulation and quality of supply. In addition, a one-week intensive working session with Ukrainian participants was staged in Vienna. The twinning project has an overall duration of two years.

## → Gas sector activities

### Participation in the CEER and ERGEG

In 2007 international cooperation in the gas sector was shaped by the CEER and ERGEG work programmes. The main task of the CEER is to prepare work for ERGEG – a consultative body set up by the European Commission. E-Control chairs the Gas Working Group, and thus has a significant influence on the functioning of the internal gas market.

During the first half of 2007 ERGEG sent the European Commission advice on the consolidation of the European internal energy market, to assist in the drafting of the proposals for the Third Energy Liberalisation Package, unveiled in September 2007. E-Control played a leading role in the areas discussed below.

### Transparency

Transparency of information is crucial to the development of properly functioning markets. ERGEG therefore made this issue a high priority in 2007, and carried out an in-depth monitoring exercise to assess the level of compliance with existing transparency requirements. The terms of reference of this monitoring study were extended at the request of the European Commission. Apart from adherence to the binding transparency requirements under Regulation (EC) No 1775/2005, the study looked at compliance with the requirements for third-party network-access services, as well as the principles of capacity-allocation mechanisms and congestion management procedures. ERGEG surveyed 43 European gas transmission-system operators. It found that about one year after the entry into force of Regulation (EC) No 1775/2005 some of the companies monitored were still failing to comply with the requirements of the Regulation.

Member states' existing sanction mechanisms were also subjected to critical scrutiny. ERGEG found that there was a lack of effective sanctions in virtually all EU member states. This represents a major obstacle to the efforts of the national regulatory authorities, which are responsible for policing compliance with the Regulation, to enforce it effectively.

### Secondary transportation capacity markets

Following a large-scale public consultation, ERGEG published recommendations for improving the performance of the secondary markets on which gas transmission capacity is traded. Due to increasing contractual congestion on gas transmission systems, trading of transportation capacity rights is growing in importance. ERGEG's recommendations are mainly aimed at transmission-system operators, which have a duty under Regulation (EC) No 1775/2005 to take reasonable steps to allow capacity rights to be freely tradable and to facilitate such trade. ERGEG urged transmission-system operators to facilitate trading in capacity rights by establishing a central trading platform and reducing the lead time for capacity transfers between shippers.

### Investments in new gas infrastructure

Growing natural-gas demand in the European Union will require investment in new gas infrastructure. This issue was a major focus of ERGEG's work in 2007. An ERGEG survey yielded the conclusion that if current practices continue all major new gas import infrastructure in the EU could be exempted from regulated access. Article 22 Gas Directive (2003/55/EC) permits the exemption of gas infrastructure such as transmission pipelines, LNG and storage facilities from regulated access under certain conditions. Because of the large number of applications for exemptions ERGEG has developed detailed

guidelines designed to ensure that the regulatory treatment of new infrastructure is consistent, and takes account of both security of supply and competition considerations.

#### Tariffs for access to European gas transmission networks

Article 3 Regulation (EC) No 1775/2005 on conditions for access to the natural-gas transmission networks requires that the tariffs and the calculation methods on which they are based be cost reflective and non-discriminatory. ERGEG is consulting stakeholders on a set of principles that it has developed for calculating the relevant costs and the tariffs derived from them. The aim is to promote the harmonisation of tariff calculation methodologies – an issue of particular importance for cross-border gas transportation between member states.

#### Madrid Forum

The purpose of the biannual meetings of the European Gas Regulatory Forum of Madrid, organised by the European Commission, is to discuss issues regarding the creation of a true internal gas market. Representatives of the European Commission, national regulatory authorities, the gas industry and European stakeholder organisations took part in the 12<sup>th</sup> and 13<sup>th</sup> meetings of the Madrid Forum, held in February and October 2007.

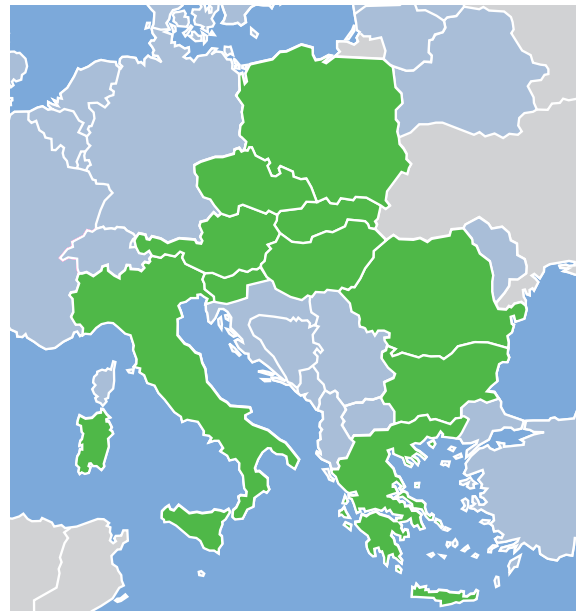
E-Control gave presentations to both meetings on the work of the ERGEG Gas Regional Initiative, monitoring of compliance with the transparency requirements, and guidelines for the application of Article 22 Directive 2003/55/EC, and made significant contributions to the discussions on these issues.

#### Gas Regional Initiative

The Gas Regional Initiative (GRI) was launched on 25 April 2006 with the aim of establishing regional markets as a step towards the goal of a single European gas market. To this end three gas regional energy markets (REMs) were established: North-West, South and South-South East. E-Control and the Italian regulator AEEG have co-chaired the South-South East (SSE) region since its inception. The region's legal foundations are: (i) the duty to maintain security of supply under the Gas Security of Supply Directive (2004/67/EC); and (ii) the duty to create cross-border competition under Directive 2003/55/EC. The following countries are grouped in the SSE REM (Chart 36): Austria, Bulgaria, the Czech

#### → Membership in the South-South East REM

Chart 36



Source: ERGEG ([www.energy-regulators.eu](http://www.energy-regulators.eu))

Republic, Greece, Hungary, Italy, Poland, Romania, Slovakia and Slovenia. Bulgaria and Romania joined ERGEG after their accession to the European Union, and were invited to participate in the work of the SSE Region.

### Current issues and priorities

In 2007 the work of the SSE REM focused on the priorities established in 2006. At the same time these were revised and adjusted to current circumstances on an ongoing basis at the regular Stakeholder Group and Implementation Group meetings. The following six priority issues were addressed by the SSE REM in 2007:

1. Identification of best practices for the introduction of standardised bulletin boards, i.e. a standardised information platform designed to increase transparency.
2. Identification of planned infrastructure projects and potential investment needs in the region (pipelines and gas storage facilities) as a first step towards regional investment planning.
3. Removal of trade barriers, particularly at interconnectors (technical and legal barriers), including interconnector-point agreements (IPAs) and operational balancing agreements (OBAs).
4. Introduction of one-stop shop (OSS) capacity booking to promote market integration and simplify gas shipments across the region.
5. Introduction of a regional entry-exit tariff system in order to simplify gas shipments across the region.
6. Development of gas hubs into regional balancing points, as a step towards the creation of attractive and liquid trading points. This will involve the publication of the prices of trades made at the Baumgarten hub. Dow Jones plans to assess and publish OTC prices at the

hub in cooperation with the market operator CEGH and EFET. In a press release published on 13 November 2007, energy market information publisher Heren announced the upcoming publication of European Gas Hub Report – a quarterly magazine that will include information on CEGH price assessments.

Despite the progress made, the creation of the conditions for a liquid and efficient gas market in the SSE Region will remain a key issue for the GRI. The publication of CEGH price assessments would thus represent an important advance. Clear price signals are crucial to active gas trading on liquid markets. E-Control and AEEG will continue to prioritise the development of CEGH into a liquid gas trading point as a goal of the SSE REM. Among other things, this will mean promoting the creation of the necessary conditions (e.g. turning the hub into a balancing point) and the removal of barriers to trade by market participants themselves (e.g. through the conclusion of OBAs/IPAs).

### Key results and achievements of the SSE region

In 2007 the GRI SSE region recorded the following key results and achievements:

- Assessment of compliance with the transparency requirements for TSOs under Regulation (EC) No 1775/2005 within the region.
- Analysis of the problems affecting gas system interoperability and the creation of markets in the region. This included assessing case studies on transport routes through the region and identifying congestion, as well as agreeing appropriate measures for overcoming the latter.
- Study of the feasibility of integrating the regional gas systems by means of a one-stop shop and regional tariffs (regional entry-exit tariff system).

- Progress towards transforming gas hubs into balancing markets and developing them into fully-fledged markets, including developing the PSV (Italy) and CEGH (Austria) hubs into gas trading points.

In its annual report to the European Commission, submitted in March 2007, the GRI gave an account of its activities to date, and of its future goals and activities. The main objective of the SSE REM's activities in 2007 was to progress from developing theoretical principles and collecting information to delivering palpable results, whilst involving the maximum possible number of market players and stakeholders. As requested by the European Commission at the 12<sup>th</sup> meeting of the Madrid Forum in February 2007, when establishing the priorities for activities in the REMs particular importance was attached to the coherence and convergence of developments across the three regions. A report on this topic was submitted to the 13<sup>th</sup> meeting of the Madrid Forum in October 2007. This reached the conclusion that the main aim should be to press ahead with the convergence of the countries in the regions. E-Control and AEEG will therefore continue to advocate close cooperation between the regulators, politicians and market participants concerned in 2008.

#### Interface between the SEE Region and the Energy Community

The Energy Community Treaty signed in Athens on 25 October 2005 established the Energy Community, which has international organisation status. The Energy Community is a process that

aims to create the necessary legal and economic framework to extend the internal energy market to South-Eastern Europe. E-Control played a key role in setting up the Energy Community, and provides it with organisational support and staffing.

#### Impact of GRI developments on Austria

Due to its co-chairmanship of the SSE Region E-Control quickly became aware of the issues of relevance to Austria. We have been able to establish priorities for the work programmes that have ensured that the ideas developed by the REM would also be workable for Austria and improve the competitive situation in our country. The GRI will affect Austria to the extent that local TSOs will be called on to participate in the development and implementation of approaches such as OSS capacity allocation and bulletin boards. The same applies to IPAs/OBAs, which the Austrian TSOs will be required to conclude where they are lacking.

#### Outlook

In 2008 E-Control will continue to play an active role in building the European internal energy market through the CEER, ERGEG and the Gas Regional Initiative. The main priorities of the 2008 CEER/ERGEG work programme are monitoring of compliance with EU regulations, technical issues relating to access to gas storage and LNG facilities, guidelines for capacity-allocation mechanisms and congestion-management procedures, and the regulatory treatment of new gas infrastructure.





Annex 2007



## → January

**1 Jan. 2007** Bewag, Linz AG, Energie AG, Wien Energie, Tiwag and Energie Graz put up their overall electricity prices by 3–6%. Verbund raises its energy price by 0.5 cent/kWh or 11.3%. One reason for the increases is higher green-power surcharges.

**1 Jan. 2007** Klagenfurter Stadtwerke hikes its gas price by 0.94%, Wien Energie by 5.3% overall, and Vorarlberger Erdgas GmbH by 5.4%.

**1 Jan. 2007** The new Energy Security of Supply Act comes into force. Changes introduced by it include easier price comparisons, more transparent billing, and a cut in supplier switching times to 4–6 weeks.

**1 Jan. 2007** Due to a reduction in system charges gas prices in all the provinces apart from Tyrol fall by 2–3%.

**5 Jan. 2007** According to an E-Control forecast green-power support contributions are set to rise by €95 m to €284 m in 2007. The reason is the increase in the number of renewable generating stations.

**8 Jan. 2007** One of Europe's largest gas fields, with about 600 bn cu m in place, is discovered in Hungary.

**12 Jan. 2007** Klagenfurter Stadtwerke has spun off Energie Klagenfurt GmbH. Verbund now holds 49% of the company.

**15 Jan. 2007** Linz AG will invest a total of €79 m in improving security of supply in 2007.

**16 Jan. 2007** The Association of Austrian Electricity Companies has appointed Barbara Schmidt as General Secretary, with immediate effect.

**20 Jan. 2007** The government is aiming to double the contribution of renewable energy sources to total energy consumption in Austria to 45% by 2020. It is also targeting a 20% improvement in energy efficiency by 2020.

**24 Jan. 2007** Austrian households spent an average of 6.2% more on energy in 2006 than in 2005. Their electricity costs were up by 5.3% and their gas bills by 5.7%.

**27 Jan. 2007** Since electricity liberalisation in 2001 only 5% of all Austrian consumers have switched suppliers. In the case of gas (liberalisation in 2002), the churn rate has been a mere 1.5–2%.

**31 Jan. 2007** The official report of an inquiry into the power black-out that hit many European consumers on 4 November 2006 blames the German E.On Group.

## → February

**1 Feb. 2007** Stadtwerke Klagenfurt ups its energy price by 15%, and fellow Carinthian utility Kelag does so by 3.4%.

**2 Feb. 2007** Iran hopes to start supplying Austria and Switzerland with natural gas in 2012.

**6 Feb. 2007** Contract heating service provider Enserv is now a wholly-owned subsidiary of OÖ Ferngas AG.

**13 Feb. 2007** OMV is pressing the EU to shoulder the risk and part of the cost of the Nabucco gas pipelines.

**14 Feb. 2007** Verbund transmission-system-operation subsidiary APG will spend over €110 m on expanding and maintaining the Austrian electricity grid in 2007. The company plans to invest €800 m up to 2012.

**15 Feb. 2007** Oekostrom AG acquires the Freudenau wind farm from operator Donau-Wind.

**19 Feb. 2007** The unusually mild winter has cut many domestic heating bills by 15%, and in Lower Austria the savings were up to 25%.

**21 Feb. 2007** Verbund expects to be supplying 100,000 Austrian households by the end of 2007. By the end 2006 it had 70,000 domestic customers.

**24 Feb. 2007** RWE and Kelag will jointly supply Linz steelmaker Voestalpine Stahl GmbH with 350 GWh/year of electricity up to 2011.

**27 Feb. 2007** IG Windkraft and other wind-farm operators will bring an action in the constitutional court in a bid to overturn the Green Electricity (Amendment) Act 2006.

### → March

**1 Mar. 2007** The new Energy Efficiency Directive targets savings of 7.2 TWh in domestic energy consumption by 2016.

**5 Mar. 2007** The Leopoldau gas power station is to be converted to dual gas and oil firing at a cost of €2.5 m.

**13 Mar. 2007** The German Cartel Office is investigating whether energy groups have been manipulating prices on Leipzig's EEX power exchange at the expense of electricity consumers in Austria and Germany.

**14 Mar. 2007** Vienna launches an energy efficiency programme aimed at cutting the city's energy consumption by 2015.

**15 Mar. 2007** The Environmental Senate has given the go-ahead for the controversial 380 kV high-voltage power line in southern Austria. The €170 m line could enter service in 2009.

**16 Mar. 2007** Salzburg AG is delivering natural gas to Bavaria. The town of Laufen has been linked into the company's gas network.

**22 Mar. 2007** Verbund will build a 350 MW pumped-storage power station in Upper Carinthia. It will use existing storage pools forming part of the Riesseck group of generating stations.

**22 Mar. 2007** E-Control calls for a 10–15% reduction in retail gas prices.

**23 Mar. 2007** EVN and Verbund plan to build four new gas-fired power stations in Austria, including two in Styria (Mellach and Zeltweg).

**24 Mar. 2007** Work has begun on Burgenland's largest biogas plant, in Pinkafeld.

**26 Mar. 2007** The construction of a new 400 MW combined-cycle gas and steam generating station in Timelkam has commenced.

**29 Mar. 2007** Energie AG is to replace its existing generating stations in Bad Goisern and Stadl-Paura with new ones by 2015, at an estimated cost of €30 m.

### → April

**3 Apr. 2007** Enel and Acciona take over Spain's Endesa for €43.5 bn after E.ON withdraws its bid.

**7 Apr. 2007** OMV announces an oil and gas discovery in the Weinviertel region. The company says the reserves are sufficient for 20–30 years' production.

**10 Apr. 2007** In future a new kind of electricity meter will save customers of Energie AG the trouble of meter readings. The company plans to replace 500,000 meters by 2012.

**12 Apr. 2007** OMV aims to increase its oil and gas production in Austria by a quarter by 2010. The two largest projects are the Matzen and Ebenthal Tief field developments.

**20 Apr. 2007** Wien Energie has begun expanding the Simmering district-heating station. Capacity is to be increased by almost one-half, from 420 to 700 MW, and efficiency is to be raised to 81%.

**22 Apr. 2007** OMV and the National Iranian Oil Company have inked a declaration of intent regarding the development of Iranian natural-gas reserves in the Gulf.

**27 Apr. 2007** The Czech government plans to allow the "Melk process" agreed with Austria to run out. Upper Austrian governor Josef Pühringer has described the move as a "provocation".

## → May

**3 May 2007** Verbund CEO Hans Haider backs the retention of the 51% state majority in the company.

**11 May 2007** Christian Kern is appointed as the fourth member of the Verbund managing board. Michael Pistauer succeeds Hans Haider as CEO.

**21 May 2007** The Verbund-Austrian Power Trading supervisory Board has extended the term of office of Günther Rabensteiner. Werner Fleischer has stepped up to the managing board.

**23 May 2007** OMV and Gazprom have signed a declaration of intent on continued cooperation on natural gas. Gazprom is to invest in Central European Gas Hub. The declaration also refers to joint storage projects.

**24 May 2007** Kelag is investing €20 m in a new storage-pump unit for the Koralpe generating station. Commissioning is scheduled for 2010.

**26 May 2007** Verbund AHP is to spend €70 m by the autumn of 2009 on expanding the largest Styrian hydro power generating station, in Hieflau.

**31 May 2007** IG Windkraft, Oekostrom AG and the European Renewable Energies Federation (EREF) are suing the European Commission over the massive subsidies extended to atomic power stations.

**31 May 2007** ÖBB (Austrian Federal Railways) will expand its group of generating stations in the Stubach Valley, in the Pinzgau area, at a cost of €110 m. Combined capacity will rise to 100 MW when the expansion schemes are commissioned in 2012.

## → June

**1 Jun. 2007** Linz AG will invest €100 m in expanding the Linz-Mitte power station. A new gas turbine will be installed at the existing site.

**2 Jun. 2007** Verbund has received clearance from the European Commission for its investment in the Sabanci Group, through which it will enter the Turkish electricity market.

**6 Jun. 2007** The Austrian government launches a renewable energy research and development programme.

**9 Jun. 2007** Tiwag acquires Energie Steiermark's interest in district-heating company Stadtwärme Lienz.

**14 Jun. 2007** Estag plans to build a gas-fired generating station in the Graz area by 2015.

**15 Jun. 2007** Kelag and RWE form Wärmebetriebsgesellschaft International (WBGI). Apart from selling power and heat generated from biomass and biogas in South-Eastern Europe the partners intend to invest €600 m in hydro power capacity in Carinthia.

**20 Jun. 2007** Eni will submit a plan for expansion of the capacity of the Trans-Austria Gasleitung (TAG) to control-area manager AGGM by the start of July.

**26 Jun. 2007** OMV increases its holding in MOL from 10% to 16.6%.

**28 Jun. 2007** Czech energy group CEZ countersues the Upper Austrian provincial government in the České Budějovice district court over its litigation against the Temelin nuclear power station.

**30 Jun. 2007** KEMA will prepare the expert opinion on the underground cabling of the planned 380 kV power line in Salzburg.

## → July

1 Jul. 2007 Vorarlberger Kraftwerke (VKW) increases its electricity prices by an overall 0.5 cent/kWh or 4%.

1 Jul. 2007 Due to lower oil prices EVN cuts its gas prices by 8%, Begas by 6%, VEG by 3% and Estag subsidiary Gas & Wärme by 7%.

1 Jul. 2007 Armin Wiersma joins the Kelag management board, succeeding Hans-Joachim Jung who is retiring.

1 Jul. 2007 In theory, domestic consumers throughout the EU are now free to choose their electricity and gas suppliers. However, some member states – mainly in Central and South-Eastern Europe – do not intend to open their markets until 2008.

1 Jul. 2007 Energie AG and Linz AG's new electricity marketing joint venture Enamo, which specialises in serving large consumers, commences operations.

1 Jul. 2007 Michael Woltran is appointed to the executive board of OMV Gas GmbH. He succeeds Otto Musilek.

12 Jul. 2007 The government has reached agreement on amendments to the Green Electricity Act. The existing arrangements are to be evaluated over the summer.

13 Jul. 2007 Tiwag is to invest €1.17 bn over the next 10–15 years in expanding the capacity of the Sellrain-Silz power plant and other generating stations.

13 Jul. 2007 MOL takes up a €2 bn loan in order to fight off a takeover bid by OMV.

16 Jul. 2007 Turkey and Iran have signed a declaration of intent on the transportation of Iranian and Turkmen natural gas to Europe. This is aimed at hastening progress on the Nabucco project.

21 Jul. 2007 A new electricity control centre in south Vienna, being built at a cost of €14 m, is due to enter service in 2009.

24 Jul. 2007 Verbund will obtain a firm option on 3 bn cu m/year of gas by investing in an LNG terminal in France.

25 Jul. 2007 OMV and Bulgargaz have agreed on joint exploration drilling in the Black Sea, and development of the local gas market.

26 Jul. 2007 Tiwag has purchased a 0.12% holding in Verbund-Austrian Hydro Power AG (AHP) from the Burgenland provincial government for €8.6m.

31 Jul. 2007 The administrative court of appeal has rejected applications for suspensive effect in respect of the construction of the 380 kV power line on the ground that granting them would be contrary to the public interest.

## → August

4 Aug. 2007 Verbund buys back wholesaler Austrian Power Vertriebs GmbH from Slovenia's Istrabenz. It had to dispose of the company as a condition of the planned "Austrian electricity solution" part-merger.

6 Aug. 2007 Südtiroler Energiegesellschaft AG plans to build a gas pipeline and a power line to North Tyrol. According to the company its partners are Tigas and Tiwag, respectively.

11 Aug. 2007 There are medium-term plans to expand the capacity of the West-Austria-Gasleitung (WAG) by building a loop line.

17 Aug. 2007 OMV has increased its holding in MOL from 16.6% to 16.9%.

21 Aug. 2007 The European Commission appoints four coordinators for important energy projects including the Nabucco pipeline and power line expansions.

30 Aug. 2007 The government has nominated Eveline Steinberger and Ingmar Höbarth as the managers of the Climate Change and Energy Fund.

## → September

**1 Sep. 2007** Verbund raises its retail price by 0.6 cent to 6 cent/kWh; the net energy price goes up by 11%.

**5 Sep. 2007** During the first half of 2007 renewable electricity output rose by 685 GWh or 50% year on year, according to the latest E-Control renewable electricity report.

**10 Sep. 2007** OÖ Ferngas plans to build a new pipeline from Puchkirchen to the border of Salzburg province.

**13 Sep. 2007** Gasnetz Steiermark GmbH plans to build a new gas pipeline along the Mürz Valley; this is to be completed in 2010.

**13 Sep. 2007** The municipal biogas plant in Vienna's Simmering district has been opened. The district-heating station will be capable of supplying 600 dwellings.

**14 Sep. 2007** Verbund founds Verbund-Austrian Renewable Power GmbH – a subsidiary that will invest in alternative energy sources.

**15 Sep. 2007** Kelag increases its electricity prices for households, and small and medium businesses by 1.14 cent/kWh or an overall 6.4%.

**19 Sep. 2007** The European Commission unveils its Third Energy Package. The key proposal is ownership unbundling of production and system operation.

**28 Sep. 2007** The Shell oil group sells its interest in Rohöl-Aufsuchungs-Gesellschaft (RAG) to EVN, E.On-Ruhrgas, Salzburg AG and Steirische Gas Wärme.

## → October

**1 Oct. 2007** Wien Energie CEO Miksits steps up to the Wiener Stadtwerke management board.

**2 Oct. 2007** EVN plans to invest €800 m in Lower Austria in the next few years. Biomass is to meet half of the province's energy needs by 2020.

**5 Oct. 2007** OMV Gas International, and partners E.On-Ruhrgas, Total, RWE and Geoplin have formed Zagreb-based Adria LNG to build an LNG terminal.

**19 Oct. 2007** The EU wishes to extend the internal market to the Balkans. Seven south-east European countries have signed a declaration of intent to this effect.

**19 Oct. 2007** Europe's largest CNG filling station has opened in Linz.

**31 Oct. 2007** The biogas processing plant in Bruck-an-der-Mur enters full-scale operation. This is the first time that large amounts of biogas have been injected into the grid.

## → November

**5 Nov. 2007** Salzburger Erneuerbare Energie GesmbH will build a biomass district-heating station and supply infrastructure in Gracanica, Bosnia-Herzegovina.

**5 Nov. 2007** OMV lays a 41 km gas pipeline parallel to an existing line in the Waldviertel region in order to meet growing demand.

**14 Nov. 2007** Total expenditure of €4 bn on new power stations and €700 m on electricity networks will be required in Austria over the next decade to maintain security of supply. The gas sector will need to spend €1.4 bn on expanding pipeline capacity.

**14 Nov. 2007** Global energy demand will rise by between 70–100% by 2050 according to a study by the World Energy Council.

**16 Nov. 2007** Economic Affairs minister Martin Bartenstein has unveiled proposals for an amended Green Electricity Act. The draft bill calls for an increase in the renewable contribution to total electricity supplies to 15%. The cap on the support payments for new renewable generating capacity is raised from €17 m to €21 m.

**19 Nov. 2007** OMV wins Gazprom as a partner for the trading platform operated by its subsidiary Central European Gas Hub GmbH. Gazprom is to take a 50% stake in CEGH.

**20 Nov. 2007** Steweag-Steg begins work on a 110 kV power line in south-eastern Styria. Completion is scheduled for 2008.

**21 Nov. 2007** Austrian gross domestic energy consumption rose by 0.6% in 2006.

**23 Nov. 2007** Verbund will invest €6.7 bn up to 2015 in doubling its generating capacity in Austria and abroad. Some €2.8 bn of the spending will be channelled to Austria.

**24 Nov. 2007** Gazprom and Italian energy group Eni plan to build the South Stream pipeline, which would carry natural gas from Russia across the Black Sea to Southern and Western Europe. The South Stream project is a rival to the planned Nabucco pipeline.

## → December

**4 Dec. 2007** Brussels' goal of ownership unbundling runs into stiff resistance from Austria, Bulgaria, Cyprus, France, Germany, Luxembourg and Slovakia. Spain and the UK are among the advocates of unbundling.

**7 Dec. 2007** A total of 150 projects conform to the criteria of the Climate Change and Energy Fund. The Fund has been allocated €500 m for a four-year period, with €150 m to be spent in each of the next three years.

**8 Dec. 2007** Lights are switched off for five minutes in Austria by supporters of the Licht aus (lights out) campaign. However, few households join the protest, which is intended to send out a signal about climate change.

**11 Dec. 2007** A study by Ernst & Young, commissioned by the Association of Austrian Electricity Companies, identifies weaknesses in Austrian electricity companies' accounting and customer information.

**15 Dec. 2007** The Vorarlberg and Tyrol provincial diets approve an agreement on water and electricity rights regarding the Illwerke power stations, under which Vorarlberg can continue to use water from Tyrol to generate electricity in return for annual payments of €1.9 m.

**22 Dec. 2007** There are no further obstacles to OMV's plans to build a gas compressor station in Weitendorf as the local council has approved a change in the zoning of the land.

**27 Dec. 2007** Wien Energie has opened the 11<sup>th</sup> CNG filling station in Vienna; there are now 86 CNG outlets in Austria.

**27 Dec. 2007** The Nabucco consortium has delayed the decision to go ahead with construction until the first quarter of 2008.



→ **Orders and notices issued by E-Control and the Energy Control Commission**

ELECTRICITY

Orders issued by E-Control

Clearing Fee (Amendment) Order, 23 October 2007

Energy Control GmbH order amending the order determining the clearing fee for the performance of the duties of clearing and settlement agents in the electricity sector (Clearing Fee Order), published on 30 October 2007 in the Official Gazette supplement of the Wiener Zeitung.

Orders issued by the Energy Control Commission

Use of System Charges (Amendment) Order

Energy Control Commission order (second System Charges [Amendment] Order 2008) amending the Commission order determining the charges for system use (System Charges Order [SNT-VO] 2006), published in the Official Gazette supplement of the Wiener Zeitung on 18 December 2007.

Notices issued by E-Control

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Notices issued by the Energy Control Commission

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→ **Orders and notices issued by E-Control and the Energy Control Commission**

GAS

**Orders issued by E-Control**

Natural Gas Clearing Fee (Amendment) Order, October 2007

Energy Control GmbH order amending the order determining the clearing fee for the performance of the duties of clearing and settlement agents in the natural-gas sector (Natural Gas Clearing Fee Order), published on 30 October 2007 in the Official Gazette supplement of the Wiener Zeitung.

**Orders issued by the Energy Control Commission**

Other shipments Gas System Charges Order 2007 (SonT-GSNT-VO 2007), September 2007

Energy Control Commission order determining the system charges for cross-border other shipments of natural gas, and for cross-border shipments from control-area entry points to control-area exit points (Other shipments Gas System Charges Order 2007 [SonT-GSNT-VO 2007]), published on 28 September 2007 in issue no. 189 of the Official Gazette supplement of the Wiener Zeitung.

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