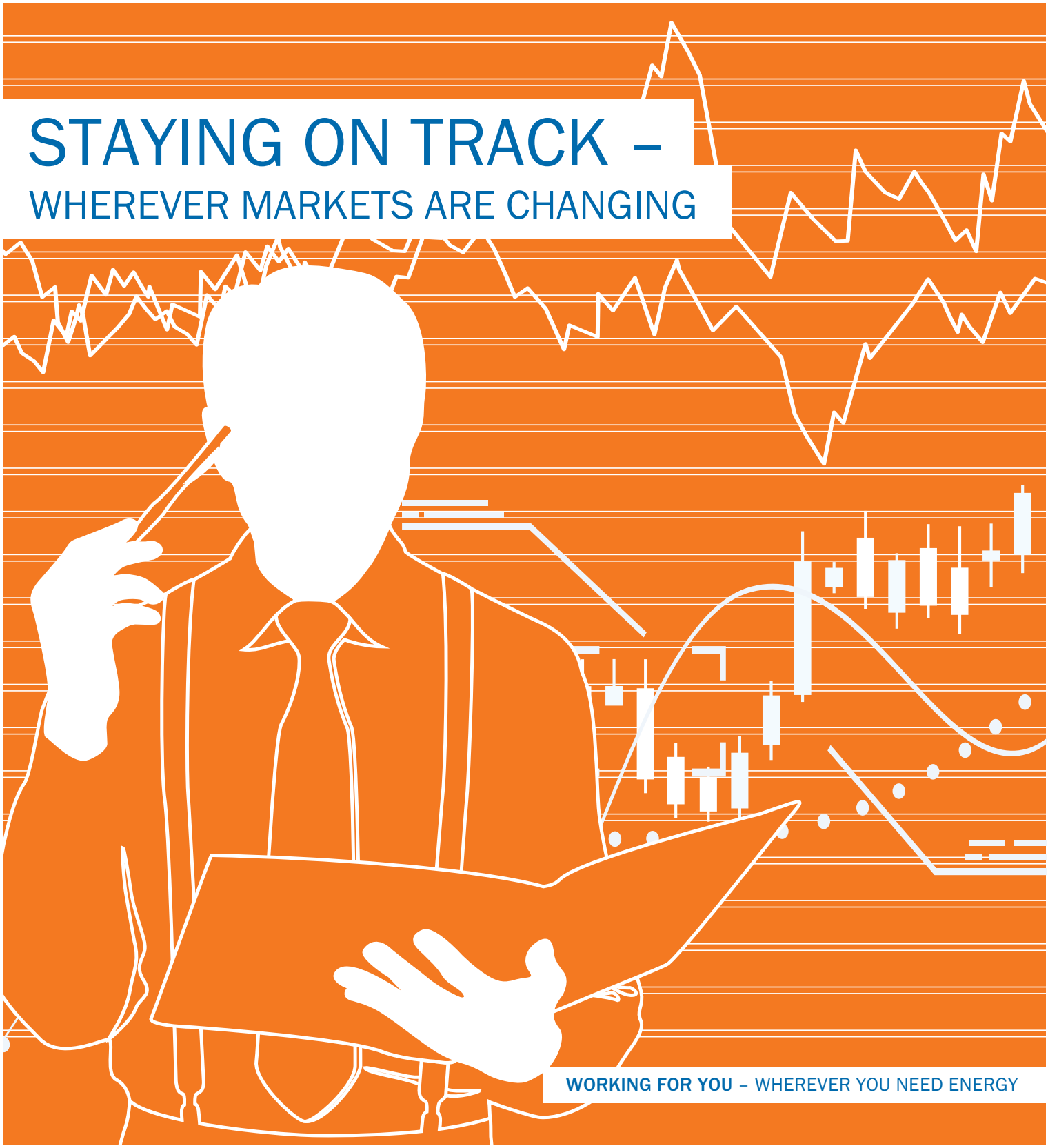
MARKET REPORT 2015
NATIONAL REPORT TO THE EUROPEAN COMMISSION

E-CONTROL

STAYING ON TRACK –
WHEREVER MARKETS ARE CHANGING



WORKING FOR YOU – WHEREVER YOU NEED ENERGY

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ELECTRICITY INDUSTRY: KEY INDICATORS

Electricity generation fell for the second year in a row in 2014, and was just above the 2011 level, at 65.1 TWh. Hydropower generation only declined by 1 TWh, while output from thermal power stations dropped by 2.8 TWh. This is similar to the level of thermal generation in the late 1980s, and almost 11.5 TWh below the record in 2010. Generation from renewable sources (wind, photovoltaic and geothermal power) climbed by 870 GWh year on year.

ELECTRICITY INDUSTRY: KEY INDICATORS

	GWh (2014)	Change vs. 2013
Gross electricity generation	65,111	–4.27 %
Physical imports	26,712	7.02 %
Physical exports	17,437	–1.42 %
Consumption from pumped storage	5,466	1.71 %
Domestic electricity consumption	68,920	–1.42 %
Peak demand (third Wednesday; MW)	10,752	–1.10 %

Table 1
Electricity industry: key indicators

Source: E-Control

GAS INDUSTRY: KEY INDICATORS

	GWh (2014)	Change vs. 2013
Imports	468,087	–9.86 %
Production	13,207	–9.07 %
Withdrawals from storage	49,320	–27.70 %
Exports	385,239	–14.65 %
Injections to storage	62,889	3.91 %
Own use and losses	3,699	14.38 %
Supplies to consumers	78,732	–9.39 %
Max. daily consumption	427.4	–12.67 %
Min. daily consumption	94.2	17.02 %

Table 2
Gas industry: key indicators

Source: E-Control

GAS INDUSTRY: KEY INDICATORS

Gas consumption declined again in Austria in 2014. At 78.7 TWh, consumer demand dipped to a level not seen since 1995 (when it was 79.6 TWh). The reasons for this were a mild winter, energy efficiency measures taking effect and reduced use of gas-fired power stations. For several months starting in September 2014, there were significant curtailments to deliveries of natural gas from Russia; however, at no time did this pose a threat to supplies to Austrian consumers. Various circumstances meant that domestic consumers were not affected by the reduced deliveries:

- the mild winter in 2014/2015 and other circumstances mentioned above led to a fall in consumer demand of 9.4% or 8.2 TWh;
- at the beginning of the winter, gas storage facilities were almost completely full, and
- exports fell by 66.1 TWh in comparison with the previous year.

These factors were enough to balance out the effects of delivery curtailments and less domestic production (see Chart 1).

YEAR-ON-YEAR CHANGES IN GAS BALANCE ITEMS, TWH

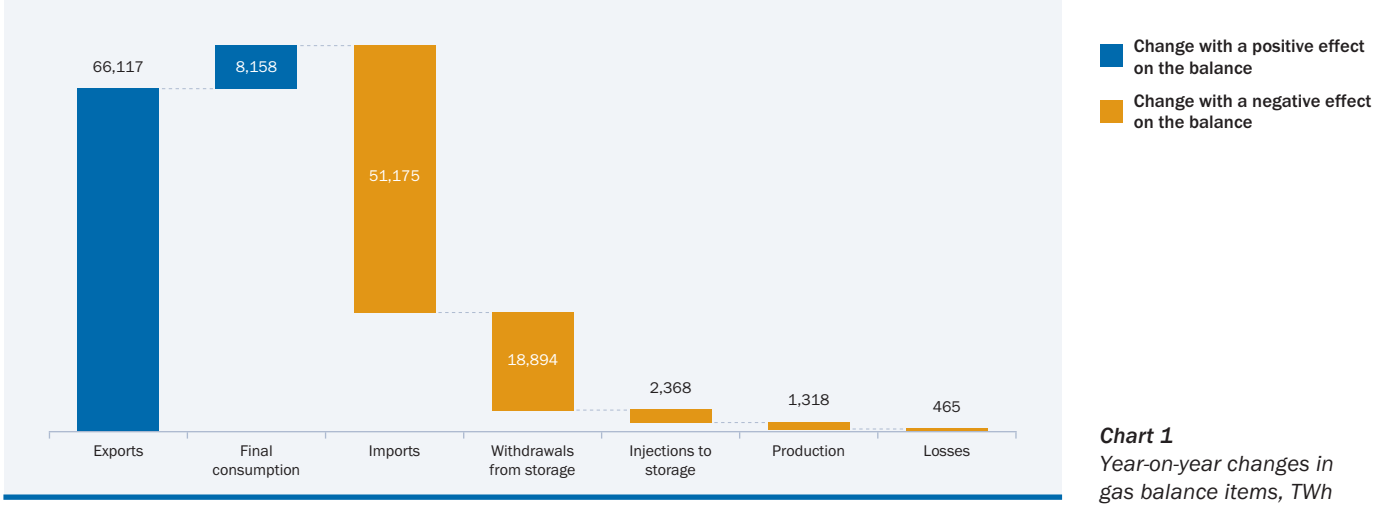


Chart 1
Year-on-year changes in gas balance items, TWh

Source: E-Control

PRICE TRENDS

Both gas and electricity prices made a contribution to stable inflation in 2014, as they softened or remained flat. While gas price indexes were lower year-on-year for sustained periods, the electricity price index hovered around the same level as the previous year for most of 2014. The trend changed in October 2014, when gas prices rose to 0.6% above the previous year's level, and electricity prices were 0.8% lower.

DEVELOPMENT OF CPI, ELECTRICITY CPI AND GAS CPI

Chart 2
Development of the Austrian consumer price index (CPI), and the electricity and gas price indexes, % (base year 2000=100)

Source: Statistics Austria

Key market developments

ELECTRICITY MARKET

Wholesale electricity prices for baseload day-ahead contracts fell further in 2014, by 12.1%, to stand at an average of EUR 32.90/MWh. This resulted in higher imports and lower generation from thermal power plants, as generation from photovoltaics and wind power in Germany were the main cause of

falling prices, and new retailers were able to offer cheap electricity products by turning to short-term procurement.

Trends in the retail market in 2014 are also worth noting. Since 2013, potential savings to households from switching suppliers have risen constantly throughout Austria. At the beginning of that year, potential annual savings were still considerably lower than EUR 50 in some federal provinces. Now, minimum potential savings are around EUR 100, and the maximum is over EUR 200 a year. As a consequence, the switching rate more than doubled in 2014, from 1.7% to 3.7%. Although such a switching rate may also be due to one-time effects, it does seem to demonstrate a reaction in the market for the first time. However, to date no statistical link has been established between potential savings and customers changing suppliers.

A market probe did not confirm the hypothesis that potential savings of this magnitude result from abusive conduct on the part of incumbent suppliers in respect of their customers. High prices are in fact typically mirrored by high procurement or marketing costs. The reason why a number of incumbent suppliers have such high procurement and marketing costs could not be established during the investigation.

The upward trend in potential savings coincided with numerous new suppliers from Austria and abroad entering the market.

Prices rose on the balancing market. Although measures including market integration, E-Control's information campaign to attract new market participants and balancing arrangements with neighbouring countries did meet with some success, costs still climbed by EUR 32 million (m), to reach EUR 203m. The main culprit was negative secondary control power, that is, short-notice call-off of energy from the electricity grid. In contrast, the costs for providing standby secondary control capacity were lower. In 2015, E-Control is continuing to work closely with the control area operator, Austrian Power Grid (APG), to take all appropriate measures to bring down costs.

GAS MARKET

Wholesale gas prices also dropped in 2014, and were 18.2% lower than in the previous year. Despite the delivery curtailments in September 2014, the mood on the market was relaxed and withdrawals from storage actually decreased. It therefore came as no surprise that the maximum monthly average price was about EUR 24/MWh – EUR 1.90 below the 2013 figure.

Additionally, low withdrawals from storage and a mild winter kept seasonal flexibility

requirements modest. As a result, prices for storage services could not be maintained and were adjusted in light of the narrow summer-winter spread. The prices published by storage system operators (SSOs) may generally be higher than the prices actually achieved at auction.

The effects of competition were more pronounced on the gas market, though still comparable to those on the electricity market. The switching rate among household consumers jumped by 2.2 percentage points, to 4.6%. This indicates that competition was somewhat more intense than in the past, based on the fact that households currently change supplier more frequently than other small consumers, such as small and medium-sized enterprises. Although contrary to typical switching behaviour, this can be explained by the fact that, at present, an average household can save a maximum of EUR 374 a year and a minimum of EUR 138 a year by switching.

Foreign entrants to the market focused primarily on the gas retail market.

Major regulatory developments

In 2014, regulatory changes focused on two areas: further standardisation of data flows between market participants, and implementation of national procedures for reporting information on wholesale energy products.

ELECTRICITY MARKET RULES

Three chapters of the Electricity Market Code were modified for the purposes of standardising data transmission.

The Electricity Market Code describes the "software" that the liberalised electricity market runs on, and defines specification of schedules, load profiles, process descriptions, information transfers and the relationships between market participants. Revised versions of chapter 7, 'Electronic Exchange of System Charges Data for Billing', and chapter 11, 'Data format for the transmission of smart meter data from network operators to electricity suppliers' were published, and make electronic invoicing compulsory.

Additionally, more detailed specifications were provided for the transmission systems for electronic data exchange. The main aim of these changes was to ensure that a large number of market participants adopt

standardised business processes. Processes that are insufficiently standardised, meaning they cannot be automated, represent a significant entry barrier to market participants.

ORDINANCE ON ENERGY WHOLESALE DATA COLLECTION

The process for statutory data collection for monitoring the wholesale energy market in Austria was developed in 2014, and was finally published on 28 January 2015. The objective of E-Control's *Energiegroßhandelsdatenverordnung* (Ordinance on Energy Wholesale Data Collection) was to align monitoring in Austria as closely as possible with the provisions of the EU Regulation on Wholesale Energy Market Integrity and Transparency (REMIT).

Although the data that need to be collected are largely identical, there are some notable differences.

As of 1 May 2015, standard contracts and related trading orders must be submitted by the trading venues. As of the same date, also contracts for balancing services must be sent to the regulatory authority.

As of 1 October 2015, non-standard contracts must be submitted by the market participants or authorised third parties.

The obligations for reporting information are in principle deemed to be fulfilled as soon as the information is transmitted to the Agency for the Cooperation of Energy Regulators (ACER). The Austrian legal framework provides for exceptions to disclosure duties beyond those in EU law that apply to domestic reporting.

THE ELECTRICITY MARKET

Network regulation

The third incentive regulation period for Austrian electricity distribution system operators (DSOs) began on 1 January 2014. An improved model is being used to regulate the DSOs' costs. The design of the regulatory regime was outlined in two papers and was the subject of public consultation. The final document is available on the E-Control website.

As in the previous year, in 2014 a number of system operators appealed agains their official cost decisions. The complaints largely corresponded to appeals brought in 2013, which are still pending at the Federal Administrative Court.

The cost basis for the transmission grid was again determined by means of the annual cost review, and adopted as the basis for calculating system charges in 2015.

Since 2009 electricity generators have instigated a large number of court proceedings, mostly in respect of the charge for grid losses for injectors and the charge for system services. Following the annulment of the E-Control Commission's system charges ordinances for 2009, 2010 and 2011 by the Constitutional Court, the proceedings continued in the courts of ordinary jurisdiction. The subject of these proceedings was the determination – after annulment of the ordinances – of appropriate charges that generators are required to pay to system operators in place of the charges originally established by ordinance.

As a result of various suggestions made by E-Control, settlement negotiations were initiated between system operators and generators, with the aim of bringing proceedings to an end more quickly. In accordance with section 48 *Elektrizitätswirtschafts- und -organisationsgesetz* (Electricity Act) 2010, allowed system operator costs are established by E-Control, so the system operators made an agreement with generators conditional upon E-Control taking into account any deficit in revenues resulting from the agreement when establishing allowed costs. As a result of extensive discussions, an appropriate solution was found which led to the termination of a large number of similar court proceedings. Generators received a refund from system operators for part of the disputed system charges. Consequently, in determining the cost basis for system operators, E-Control will take account of decreased revenues resulting from the agreed settlement, by means of the regulatory account in accordance with section 50 Electricity Act 2010 (for statutory settlement of decreased revenues for periods in the past).

The result of the negotiations meant that a large number of court proceedings which had been ongoing for several years could finally be closed.

The grid utilisation charge and charge for grid losses remained relatively stable, with the *Systemnutzungsentgelteverordnung 2012-Novelle 2015* (2012 Electricity System Charges [Amendment] Ordinance 2015) resulting in an increase of 0.33% in the Austrian average. Adjustments to the charges varied widely between grid zones: in Linz, Vorarlberg, Lower Austria and Upper Austria, there were marked decreases of up to 7.4%. The effects of the regulatory account pursuant to section 50 Electricity Act 2010 led to increased costs in most cases, but these were balanced out by major reductions in the charge for grid losses in some zones due to a further fall in the procurement prices that system operators pay for system losses. Overall, charges fell in most grid zones as a result. The exceptions were Klagenfurt, Styria and Vienna, where there were large rises in the charges. In Vienna, the increase was due to increased investment activity, while in Klagenfurt it resulted from application of the regulatory account; charges in Styria went up due to a combination of both of these factors. Altogether, system costs in Austria for 2015 increased by about EUR 5.3m (to reach a total

AUSTRIAN ELECTRICITY SYSTEM CHARGES, cents/kWh

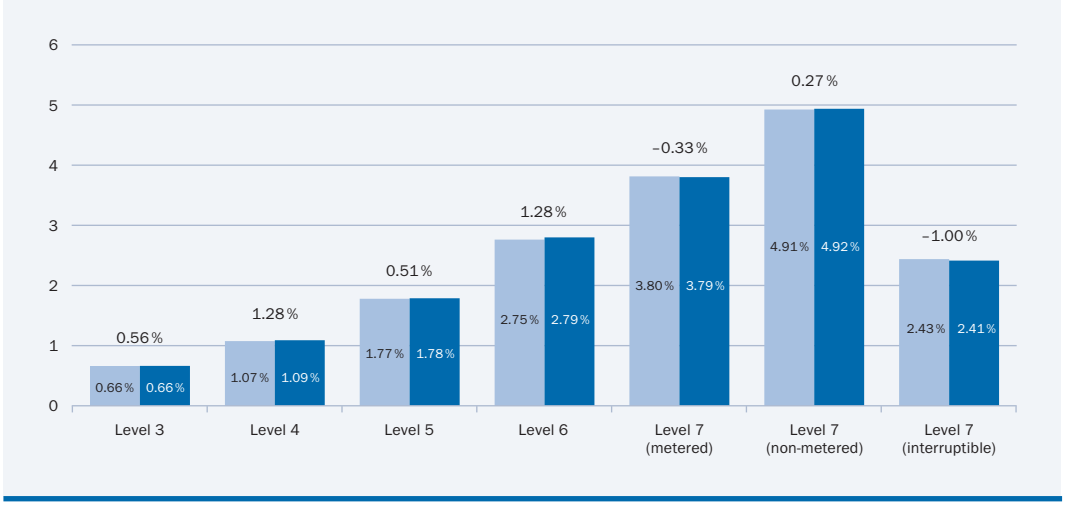


Chart 3
Austrian electricity system charges, over time

Source: E-Control

of around EUR 1.6 billion [bn]) in comparison with the previous year.

In the non-metered consumer segment, the flat rate portion of the grid utilisation charge payable to system operators rose across the board. This followed consideration of submissions made by system operators which requested an adjustment to the flat rate component in the interest of better cost reflectiveness. In addition to the requirement for cost reflectiveness, energy efficiency must also be taken into account in accordance with section 51(1) Electricity Act 2010, which requires the inclusion of consumption-related elements in the costs, and therefore does not permit a purely flat rate grid utilisation charge. Against this background, it is clear that an increase in the flat rate component is needed, as well as standardisation in Austria over the long term. The rise will not result in any additional income for system operators, and care was also taken to ensure that no significant additional burden was placed on small consumers.

Since E-Control took up its regulatory activities in 2001, reductions in system charges have cut consumers' bills by almost EUR 633m a year. On average the charges are more than 28% lower than in 2001. It should be noted that this figure is based on nominal values – if overall inflation is taken into account, charges have fallen by about 40% compared to the 2001 base.

Market mechanisms

MARKET RULES

The market rules comprise the technical and organisational rules for system operators and users (TOR) and the Electricity Market Code as well as the general terms and conditions for system operators (GTC), the green power settlement responsible and the imbalance settlement responsible.

Pursuant to section 22(1-2) *Energie-Control-Gesetz* (E-Control Act) settlement responsible, the Electricity Market Code and the TOR were drawn up in collaboration with market participants and system operators, and are revised on an ongoing basis. The general terms and conditions must be approved by E-Control in accordance with section 41 Electricity Act 2010, section 29 *Ökostromgesetz* (Green Electricity Act) 2012 and section 11 *Verrechnungsstellengesetz* (Billing Agencies Act) 2000. Market rules become legally effective by their incorporation into private law contracts between the market participants.

TECHNICAL AND ORGANISATIONAL RULES FOR SYSTEM OPERATORS AND USERS

Comprising several parts, the TOR form a comprehensive national code that applies equally to all operators of transmission and distribution networks and all system users. They are a set of operational and maintenance rules for electricity networks, applied in order to ensure security of supply and interconnected operation, and they govern cooperation between generating plants, transmission and distribution networks, and system users' equipment.

In 2014, Part E, 'Technical precautions against major disturbances and limitation of their effects', was revised. Version 2.2 entered into force on 25 August 2014, and contains changes based on the ENTSO-E Operation Handbook.

ELECTRICITY MARKET CODE

The Electricity Market Code describes the "software" that the liberalised electricity market runs on. It defines the relationships between market participants, specification of schedules, load profiles, process descriptions and information transfers. During 2014, chapters 3, 7 and 10 of the Electricity Market Code were revised. Version 5.6 of chapter 3, 'Schedules', entered into force on 1 July 2015 and contains changes to and clarifications of external schedules, generation schedules and availability schedules.

Version 2.0 of chapter 7, 'Electronic Exchange of System Charges Data for Billing', and version 1.1 of chapter 11, 'Data format for the transmission of smart meter data from network operators to electricity suppliers in accordance with section 2 Data Format and Consumption Data Ordinance', were published on 13 May 2015, and make electronic invoicing compulsory. Additionally, more detailed specifications were provided for the transmission systems for electronic data exchange, and the schematic diagram for transmissions as well as the product number catalogue were adapted.

Version 2.3 of chapter 10, 'Submission of Information from System Operators to Other Market Participants; 1st and 2nd Clearing' entered into force on 1 March 2015. It provides more detailed rules for data exchange for billing of the grid utilisation charge introduced by the 2014 amendment to the Electricity System Charges Ordinance.

BALANCING MARKET

Gaps between forecast and actual power generation and electricity consumption, as well as unplanned supply interruptions, are balanced by injecting or withdrawing balancing energy. Depending on the duration of these deviations, a variety of assets and products are employed, namely:

- **Primary control:** primary control generators automatically offset imbalances within the first 30 seconds of their occurrence, and are intended to prevent deviations in system frequency.
- **Secondary control:** used where imbalances last for more than 30 seconds, to restore system frequency to 50 Hz.

- **Tertiary control** (minute reserve): takes over from secondary control where imbalances persist for longer than 15 minutes.

- **Unintentional deviations:** these occur where it is not possible to adjust to an imbalance sufficiently or at all within the control area concerned, and the balance is therefore restored by inadvertent exchanges with surrounding control areas in the ENTSO-E grid.

Deviations from the schedule submitted by a balance group, for example owing to divergence from forecasts, necessitate balancing energy. The net balancing energy required by all the balance groups in a control area is the demand for physical balancing energy, which must be met by the control area operator.

Unlike in most other EU member states, in Austria financial accounting for balancing energy is performed by an independent imbalance settlement responsible appointed by the control area operator. Since the commencement of the cooperation agreement between APG and Vorarlberger Übertragungsnetz GmbH (VÜN), Austrian Power Clearing and Settlement (APCS) has performed this task for the whole of Austria.

The market rules for balancing energy are laid down by the Electricity Market Code and by the general terms and conditions of the imbalance settlement responsible. The regulator draws up the market rules in consultation with the market participants, and is responsible for approving APCS's terms and conditions.

The control area operator, APG, procures balancing products by holding competitive tenders. Participating facilities must meet high technical requirements. Contracts for the supply of primary and tertiary control energy have been awarded in this way since 2010 and 2001 respectively. Secondary control power was procured by way of bilateral contracts with power station operators until 1 January 2012, when the changeover to a competitive tendering mechanism took place. Unintentional deviations on the ENTSO-E interconnected grid are made good by a compensation programme, operated via the EXAA power exchange.

In response to quantity and price-based increases in the cost of procuring balancing services, E-Control launched an information campaign for potential participants in the Austrian balancing market. The campaign is accompanied by other measures such as identifying and where necessary removing barriers to entry, steps to encourage demand-side participation in the balancing market, reducing the minimum pool size, removing the minimum size per plant, amendments to the market rules in consultation with the control area operator, and promoting initiatives aimed at integrating the balancing market with neighbouring markets.

An example is the Imbalance Netting Cooperation with Slovenian transmission system operator (TSO) ELES, which has been in place since May 2013. Under the cooperation, power surpluses or shortfalls in a control area are balanced by means of transfers to or from another control area, with the aim of reducing call-offs of secondary control energy. This has already generated cost savings of several million euros. Since April 2014, Austria has also been part of the International Grid Control Cooperation (IGCC), which evens out control area imbalances by means of collaboration between a total of nine TSOs in Belgium, the Czech Republic, Denmark, Germany, the Netherlands and Switzerland. Participation has resulted in savings of over EUR 10m. Based on these positive results, expansion of cooperation to other neighbouring countries is planned.

The international partnerships, combined with the initiatives launched in Austria with the aim of stimulating the balancing market, are clearly helping to keep the costs for balancing services in check.

SECURITY OF SUPPLY AND SUMMER RESERVE

In addition to the problems presented by north-south power flows, east-west flows are posing increasing challenges for electricity networks. The changes in power flows over the years are the consequence of generation from renewable sources, the resulting change in energy prices, and declining electricity production at conventional power stations.

During the winter sufficient thermal capacity is available to transmission system operator APG thanks to heat generation systems that are connected to the grid, but in summer additional capacity must be procured to supplement the available generating capacity in order to meet these challenges.

APG secured the thermal generating capacity required in summer 2014 through a selection process agreed with E-Control. Two plants with a total capacity of approximately 800 MW were selected to help ensure grid stability. This roughly corresponds to the capacity of four large hydropower plants on the Danube. Both plants, each with installed capacity of about 400 MW, are available as “summer reserve” from 1 May to 1 September, with the contract agreed for three years. The selection process was conducted transparently and in accordance with clear criteria that focused on financial and technical efficiency.

APG procured thermal generating capacity for the first time in 2014, for a period of seven weeks, and the reserve capacity was called off as and when required.

INVESTMENT IN ELECTRICITY NETWORK INFRASTRUCTURE

Electricity market liberalisation and the rapid changes it has brought about have placed significantly higher demands on transmission

and distribution network infrastructure. Power station use determined by market prices, coupled with rising electricity consumption, new power station projects and the huge expansion in renewable generation have resulted in high loads and congestion. Consequently, expansion of the transmission system is essential in Austria, and even more pressing in neighbouring countries, in order to guarantee supply security in the future. Large investment and renewal projects were completed by distribution system operators in Upper Austria and in Styria. Investment focused mainly on renewing power lines and extending capacity, with a view to supporting security of supply and meeting the high connection and injection demands of renewable generation (principally wind power). Investment in smart technologies (such as smart meters and smart grids) climbed again, though it remains modest.

The majority of projects currently under way in the transmission system are aimed at expanding transformer substations and boosting network capacity.

Investment is expected to remain high in 2015. This is mainly a result of modification of network infrastructure, as well as the growing demand for capacity and system connections resulting from the transportation of renewable energy on the distribution network. The decision to be taken at the end

GROSS INVESTMENT IN ELECTRICITY NETWORK DEVELOPMENT, EUR '000

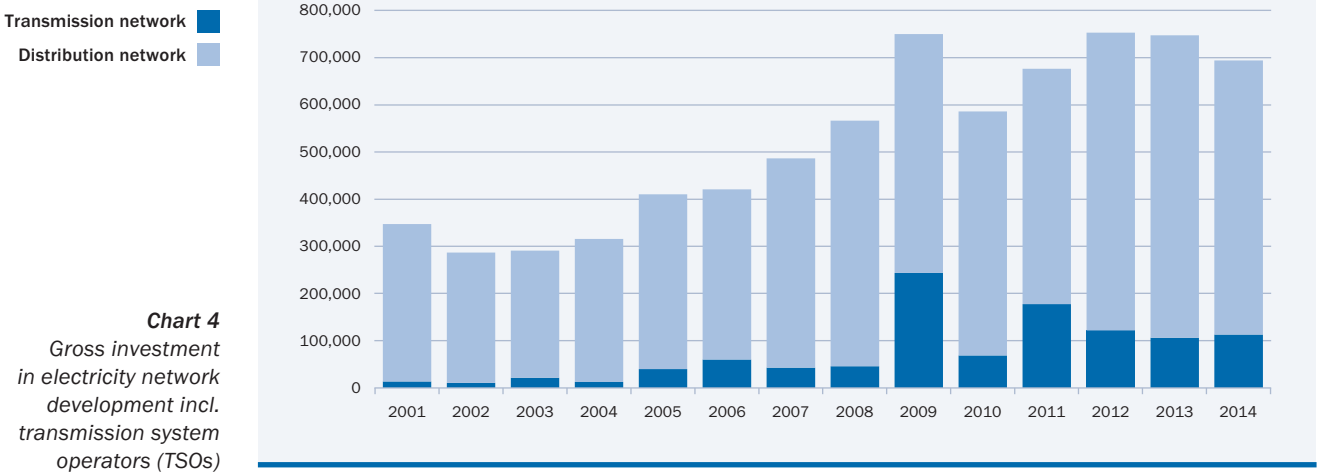


Chart 4
Gross investment in electricity network development incl. transmission system operators (TSOs)

Source: E-Control (aggregate company data, 2014 survey; acquisition and production costs, incl. consumer contributions to connection costs)

of 2015 on investment in the 380 kV loop, namely the implementation of the Salzburg II 380 kV line project, will be significant for the transmission system. Completing the project would lead to a marked upswing in investment in the transmission network in the coming years, as well as boosting supply security.

Chart 4 shows investment in the electricity distribution and transmission networks over the past 11 years. Investment rose steadily until 2013. This trend was partly due to new projects in the transmission and distribution networks, and partly to increased investment in renewal of the existing infrastructure. Investment is forecast to taper off in the coming years, as the majority of expansion and renewal projects are completed. In future, the primary focus in the distribution network will be on integrating renewable energy sources (wind and solar power) and rolling out smart meters. As already mentioned, investment in primary infrastructure will be the priority for the transmission system. The attractive regulatory framework for companies investing in the network still provides for compensation in the form of cost-reflective system charges, as well as the necessary incentives that promote essential investment.

NETWORK DEVELOPMENT PLAN (NDP)

Section 39(1) Electricity Act 2010 charges E-Control with monitoring the TSOs' network development plans. APG and VÜN again submitted NDPs in 2014, pursuant to section 37 Electricity Act, and the E-Control Executive Board approved them by official decision at the end of the year.

The TSOs are obliged to draw up ten-year network development plans on an annual basis. The plans must contain scenarios that form the basis for projects of national and international importance, as well as cost estimates, risk analyses and detailed project descriptions. Both the TSOs and E-Control are required to hold consultations on the network development plans, after which E-Control assesses the technical and economic feasibility of the projects, before issuing approval decisions for projects that receive a positive assessment.

Network development plans include projects of national and European importance, grid connection and interconnection projects and, since 2012, projects that do not require entirely new construction of power lines, but focus on adaptation of the existing network to boost performance and allow optimised operation. E-Control takes a positive view of the principle of putting network optimisation before grid reinforcement and expansion.

The approval process for network development plans was improved in a number of ways this year. Submission is now based on a standardised form. This facilitates structured and detailed checking of data

and will allow for easier comparison of data between successive years in future. Thorough analysis of Austrian network expansion projects is important, especially in relation to the selection of projects of common interest (PCIs) at the European level on the basis of the EU's energy infrastructure package, where close and effective cooperation between the various participants is essential to promoting Austria's interests.

RENEWABLE ELECTRICITY

Supported renewable electricity output grew by 15% year on year in 2014. As in previous years, the largest expansion was in wind power, at 670 GWh. The highest increase in percentage terms was in solar photovoltaic – output in this category jumped by 63%. Injection from solid biomass and biogas generation declined slightly. Table 3 shows supported renewable electricity output over time.

Table 4 sets out the maximum capacity of generating stations under contract to the green power settlement responsible, OeMAG. Here, too, wind power posted the biggest growth. Installed photovoltaic capacity rose by 25%, but this was outpaced by the expansion of wind power capacity, which increased by 27%. Overall, there were slight declines in the other forms of generating capacity, with the exception of liquid biomass, which saw capacity drop by 44%.

SUPPORTED RENEWABLE ELECTRICITY OUTPUT, GWH

Energy source	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Wind power	366	924	1,328	1,738	2,019	1,988	1,915	2,019	1,883	2,386	2,970	3,640
Solid biomass	99	313	553	1,086	1,631	1,900	1,958	1,987	1,969	1,983	2,013	1,941
Biogas	42	102	220	358	440	503	525	539	520	554	544	543
Liquid biomass	2	18	33	54	71	36	39	30	12	0	0	0
Photovoltaic	11	12	13	13	15	17	21	26	39	101	215	351
Other supported renewable electricity	78	76	65	55	54	52	46	45	41	32	26	21
Total "other" renewable electricity	**598**	**1,445**	**2,212**	**3,304**	**4,230**	**4,496**	**4,503**	**4,647**	**4,464**	**5,057**	**5,769**	**6,496**
Small hydro	3,386	3,995	3,561	1,806	1,527	945	644	1,258	988	1,095	1,371	1,703
Total supported renewable electricity	**3,984**	**5,440**	**5,773**	**5,110**	**5,757**	**5,441**	**5,147**	**5,905**	**5,452**	**6,152**	**7,140**	**8,199**

Table 3
Supported renewable electricity output, over time

Source: OeMAG

These changes were reflected in the number of installations, most notably in the wind power and photovoltaics categories: 1,711 new photovoltaic systems and 80 new wind power installations were registered, while the number of liquid biomass plants fell from 32 to 27. In total, 1,840 more installations were under contract to OeMAG in 2014 than a year earlier. As in the past few years, new photovoltaic installations accounted for the overwhelming majority of the new registrations.

EMERGENCY INTERVENTION MEASURES

Under the *Energielenkungsgesetz* (Energy Intervention Powers Act) 2012 as amended by Federal Law Gazette (FLG) I no 41/2013, E-Control is responsible for the preparation and coordination of the main intervention measures to be taken in response to emergencies in the electricity and gas sectors. The necessary data are collected under the *Energielenkungsdaten-Verordnung* (Energy Intervention Data Ordinance), which was revised in 2014 so that more information is

TOTAL CAPACITY OF RENEWABLE GENERATING STATIONS UNDER CONTRACT TO GREEN POWER BALANCE RESPONSIBLE PARTIES OR OEMAG, MW

	Under contract to green power balance responsible parties at year end (as at 31 Dec)			Under contract to OeMAG[1] at year end (as at 31 Dec)								
Energy source	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Biogas	15.0	28.4	50.7	62.5	74.9	76.2	77.0	79.2	79.8	81.2	82.5	80.5
Solid biomass	41.1	87.5	125.9	257.9	309.1	311.7	313.4	324.9	325.4	319.8	321.5	318.6
Liquid biomass	2.0	6.8	12.4	14.7	16.5	14.5	9.6	9.4	9.4	8.7	5.0	2.8
Landfill and sewage gas	22.7	20.3	21.2	13.7	21.4	21.2	21.1	21.2	16.0	16.6	15.8	14.3
Geothermal energy	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Photovoltaic	14.2	15.1	15.4	15.3	18.8	21.7	26.8	35.0	54.7	172.1	323.9	404.4
Wind power	395.6	594.6	816.9	953.5	972.0	960.9	984.1	988.2	1,055.8	1,306.8	1,555.4	1,980.6
Total "other" renewable electricity	**491.4**	**753.6**	**1,043.4**	**1,318.5**	**1,413.6**	**1,407.1**	**1,432.9**	**1,458.7**	**1,542.1**	**1,906.2**	**2,305.0**	**2,802.1**
Small hydro up to 10 MW (supported)[2]	858.1	851.5	709.7	320.9	380.2	124.7	200.9	303.8	242.2	276.0	342.3	390.9
Total "other" renewable electricity and small hydro	**1,349.5**	**1,605.1**	**1,753.1**	**1,639.3**	**1,793.8**	**1,531.8**	**1,633.8**	**1,762.5**	**1,784.3**	**2,182.2**	**2,647.3**	**3,193.0**

1 Renewable electricity generating stations under contract to OeMAG and already in operation
2 Excluding small hydro power stations not under contract to green power balance responsible parties or OeMAG that sell their electricity at freely negotiated prices instead of regulated feed-in tariffs

Table 4
Total capacity, over time

Source: E-Control, green power balance responsible parties and OeMAG (preliminary statistics, status: April 2015)

gathered on current flexibility and prevailing conditions in the district heating segment.

E-Control also carries out regular trial data transfers in collaboration with market participants and public authorities in order to prepare for congestion. These are designed to test the processes between federal, provincial and district authorities, particularly with regard to general restrictions on provincial consumption and the implementation of rationing for selected industrial facilities. The insights gained from these exercises provide a basis for future activities.

ICT AND CYBER SECURITY

The availability of energy around the clock is increasingly dependent on secure information and communications technology (ICT), in particular with regard to safe network operation. In order to guard against potential threats to ICT systems, initiatives introduced to improve the level of protection in collaboration with the domestic electricity and gas industries were continued, and measures for identifying, evaluating and reducing risks were implemented. E-Control also participated in Europe's biggest cyber security exercise to date, Cyber Europe 2014, together with more than 600 other entities responsible for security from all over the continent. The exercise involved testing emergency technical and organisational measures in a secure environment, in order to improve protection levels.

International developments

REGIONAL INITIATIVES – CONGESTION MANAGEMENT

Work by TSOs and exchanges in Central and Eastern Europe (CEE) in preparation for load-flow-based market coupling continued, but did not progress as hoped. The project partners have established a project structure and project management, and a detailed project plan and budget are being developed. A major consideration is the question of how neighbouring countries such as Croatia and Romania can be involved. However, such structural questions have led to delays, with the result that implementation cannot be

expected until 2016. Another major task is specifying a schedule that includes trial periods, which entails very close coordination with neighbouring regions.

Significant progress was made in the Central-South region. The market coupling model prepared by TSOs and exchanges underwent a successful trial in February 2015, and entered operation on one of Austria's borders (to Italy) for the first time. The results so far have been satisfactory, with more efficient allocation of daily cross-border capacity. Only the border between Austria and Italy is currently affected by this change. The next stage will be to test the model and prepare for its expansion to the border with Slovenia.

In parallel, TSOs and exchanges in Austria, France, Germany and Switzerland are making preparations to link Switzerland's northern border with the current European system using implicit auctions. However, unresolved questions on how to incorporate the Swiss market into the EU legal framework mean that the model has not yet been applied in practice. As soon as the political discussions are concluded, these borders can be incorporated into the European market coupling system at short notice.

Although defined as the target model in Europe, load-flow-based capacity calculations had not been implemented in practice. After extensive preparations, the TSOs in the Central-West region presented a system at the end of 2014 and implemented it successfully in May 2015. Introduction of the system had to be postponed from the beginning of the year due to unscheduled outages at power stations in Belgium. Following additional checks and improvements, regulators gave the system the green light at the start of 2015. APG's participation has increased, and since the end of 2014 data on the network situation in Austria are transmitted directly and taken into account.

Austria is also involved in developing the future European trading platform for intraday allocations. However, delays continue to arise due to the large number of exchanges and TSOs taking part and the complexity of procuring the necessary IT solution. A number of project milestones were missed in 2014, but closer cooperation with the European Commission and ACER should result in more rapid progress.

Discussions on a common pricing area with Germany for the wholesale market have intensified in recent months. In this regard, ACER requested ENTSO-E to conduct an evaluation of bidding zones in Europe. This process will continue into 2016. Additionally, the German Federal Network Agency has developed a scenario including capacity allocation at the German-Austrian border in

winter 2019/20 as part of its calculation of standby capacity for redispatch in accordance with the *Reserve-Kraftwerksverordnung* (Reserve Power Plant Ordinance). In case of any decision on allocating capacity, the advantages and disadvantages of the different options need to be thoroughly assessed. In principle, cross-border market areas conform to the aim of an internal market for electricity in Europe, and to the goals of the Commission's European Energy Union initiative.

REDISPATCH – TSO SECURITY COOPERATION (TSC)

APG has intensified its ongoing collaboration with a large number of TSOs (from Croatia, the Czech Republic, Denmark, Germany, Hungary, the Netherlands, Poland, Slovenia and Switzerland) under the TSO Security Cooperation (TSC) initiative. The establishment of a company jointly owned by the TSOs was a major step forward. This positive development was accompanied by improved coordination of multilateral measures in critical network situations. Shorter-term reconciliation and a more cost-reflective basis for cost sharing were also established. Under a procedure developed by the TSOs at the end of 2014, regulators approved a trial phase for the calculation method, provisionally scheduled to begin in mid-2015.

NETWORK CODES

Network codes are a core element of the third energy package and are intended to improve technical cooperation and market integration in Europe. In 2014, an electricity network code (guideline) was accepted by a Cross-Border Committee of member states for the first time. The Guideline on Capacity Allocation and Congestion Management will enter into force around the middle of 2015, and will result in greater harmonisation of congestion management procedures as well as making them more efficient.

Because the procedure for drafting network codes, their acceptance and their entry into force requires extensive and detailed cooperation between the European Commission, TSOs and regulators, delays occurred in previous years. However, there are now a number of pending documents which are due to be adopted in the coming months. These include network codes on grid connection of generators, demand-side assets and high-voltage direct current systems, and others related to transmission system operation, operational planning and long-term capacity allocation. New codes will be implemented in Austria in the medium term by adapting the market design appropriately.

Competition on the wholesale market

Exchange-based day-ahead trading in the German/Austrian delivery zone takes place on the EXAA and EPEX SPOT electricity exchanges. In 2014, 7.83 TWh of electricity was traded on the Austrian EXAA exchange, and the German/Austrian trading zone accounted for 262.9 TWh of the total day-ahead trading volume of 382 TWh on EPEX. The EXAA trading volume remained the same, while volumes on EPEX again increased. Small quantities of renewable electricity were traded on EXAA during 2014 and, as expected, prices were subject to markups compared with standard products. EXAA launched quarter-hour trading in 2014, applying arbitrage-free pricing, meaning that the price for an hour always equates to the mean of the prices for the respective quarter hours. EPEX also started quarter-hour trading on the German intraday market.

The price differentials between the EXAA and EPEX markets are solely due to the different price limits and auction times on the exchanges, so the average baseload prices – EUR 32.90/MWh on EXAA and EUR 32.76/MWh on EPEX – only differ slightly. This represented a year-on-year fall of around EUR 5/MWh on both exchanges. Peakload prices averaged about EUR 38/MWh in 2014.

Baseload prices were somewhat lower than in neighbouring market areas – EUR 34.63/MWh in France and EUR 36.79/MWh in Switzerland. Chart 5 shows the evolution of prices over time. A significant decline in prices can be seen in the summer months in each year. The main reasons for the easing of prices was the record infeed of energy produced using cheap brown coal and from renewable sources. In addition, the price of emission allowances remained extremely low throughout the year.

Trading volumes on the intraday market were considerably lower – trading on the continuous market for the German/Austrian delivery zone amounted to 26.4 TWh, although this was more than 33% higher than in the previous year. This was the outcome of the further increase in fluctuating injections of renewable energy and the need to restructure market participants' portfolios at short notice.

The EEX futures market also saw a rise in trading volumes, with contracts concluded for a total of 1,570.4 TWh – an increase of 24%. Prices also fell year on year – having started 2013 at over EUR 40/MWh, in 2014 they rarely passed the EUR 36 mark. As on the spot market, expectations that low price

PRICES ON THE EXAA DAY-AHEAD MARKET (seven-day sliding average), EUR/MWh

Chart 5
Prices on the EXAA day-ahead market

Source: EXAA

EEX BASELOAD FUTURES PRICES, EUR/MWh

Chart 6
EEX baseload futures market

Source: EEX

sentiment would prevail in the front year, due to an increase in generation from brown coal and low CO_2 emission allowance prices as well as strong growth in the share of energy from photovoltaics and wind power, proved to be correct. Chart 6 shows a tendency towards backwardation throughout the year, with contracts for delivery in 2016 trading lower than 2015 futures.

Efforts to enhance transparency on the wholesale market continue to focus on exchange-based trading, although a growing range of transparency platforms (e.g. sites operated by ENTSO-E and EEX) have already helped to bring fundamental data out into the open. OTC data such as volume and pricing information are only available from charging price assessment services.

BALANCING MARKET TRENDS

The prices for balancing services procured by the control area operator rose sharply in 2014 in comparison with the previous year. As Chart 7 shows, the costs for standby balancing capacity either remained the same (in the case of primary control) or fell sharply (secondary control and incident reserve/tertiary control). In contrast, the costs for balancing energy that was called off (secondary and tertiary control) almost doubled. The largest cost item is secondary control energy, with provision of negative

ANNUAL CONTROL RESERVE COSTS, EUR m

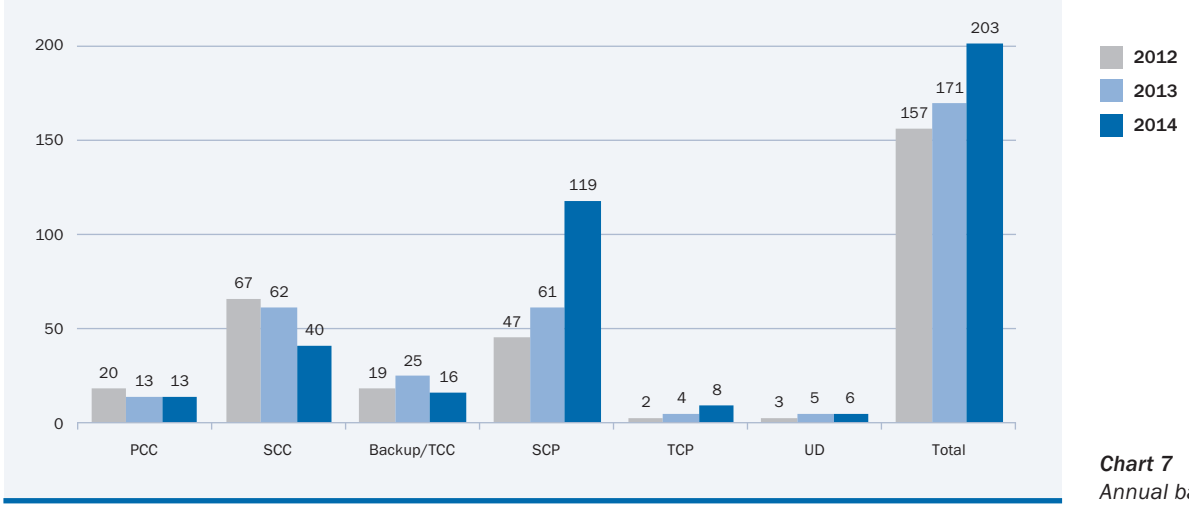


Chart 7
Annual balancing costs

Source: APG

secondary control power making up 63% of the total in this category.

Chart 8 shows the quantity of balancing energy called off, and the average call-off price, in each calendar week. Significantly less negative secondary control power was needed following the start of Austria's participation in the IGCC in calendar week 17. But this fall was counterbalanced by a significant jump in prices. Starting from a base price of EUR –100/MWh, the price reached EUR 533/MWh in week 45.

CALLED-OFF BALANCING ENERGY:
QUANTITIES AND AVERAGE CALL-OFF PRICES, GWh and EUR/MWh

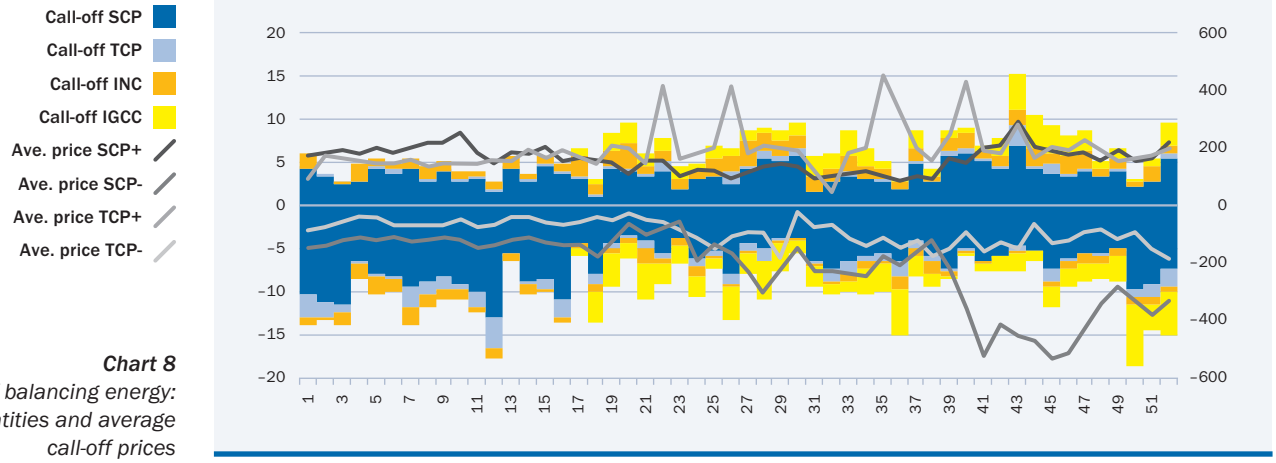


Chart 8
Called-off balancing energy: quantities and average call-off prices

Source: APG

Competition on the retail market

MARKET TRENDS

The electricity consumer price index (CPI)[1] rose at the beginning of 2015, as it did in the two previous years, reaching its highest value since market liberalisation, at 136.7. This was due to the change in renewable electricity costs. Consumption-based components fell slightly, but the flat-rate renewables charge increased considerably. For a typical household[2] this meant an increase in renewable electricity surcharges from EUR 68 to EUR 86 per year, excluding VAT. Since 1 February 2015, all consumers have been charged a CHP flat fee, which varies depending on grid level; for households the fee is EUR 1.25 a year.

System charges rose by 0.27% on average in Austria at the beginning of 2015. Households in Klagenfurt faced the largest increase, at 5.3%, while in Linz the costs fell by 8.0%.

Prices eased in autumn 2014 as the Energie Allianz companies (Energie Burgenland,

ELECTRICITY CONSUMER PRICE INDEX

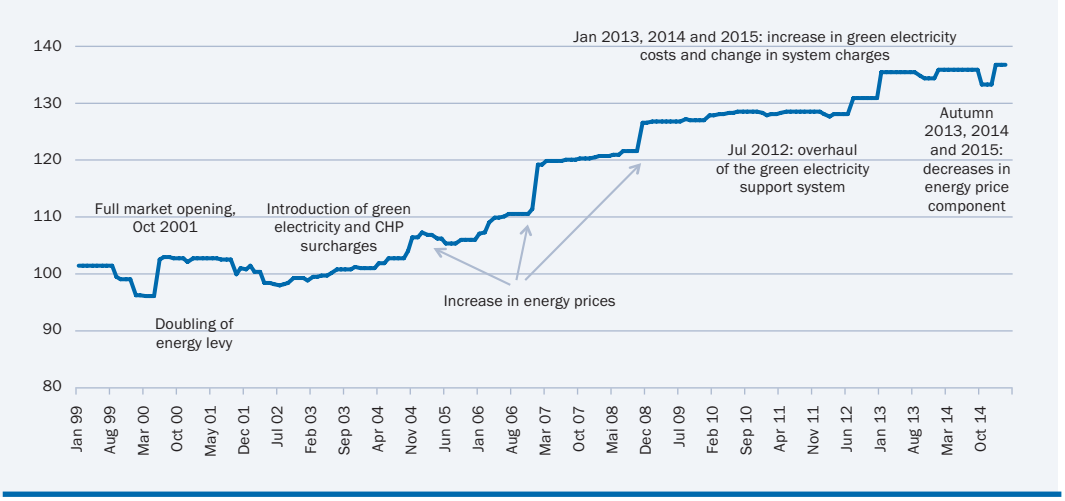


Chart 9
The electricity CPI, over time (October 2001=100)

Source: Statistics Austria and E-Control

[1] The electricity CPI is compiled by Statistics Austria and takes into account overall costs, which comprise the energy price, system charges, and taxes and levies paid by final consumers.
[2] A typical household is assumed to have an annual electricity demand of 3,500 kWh.

EVN, Wien Energie and switch) implemented reductions that brought the energy price component of their products down by about 10%.

At the start of 2015 Salzburg AG also reduced energy prices, by about 6%, followed in April by 10% decreases from Energie Steiermark and Energie Graz. Many smaller regional suppliers followed the trend, so that by the end of April 32 providers had reduced their energy prices.

In total, there are over 130 electricity suppliers in the market for household and small business consumers. Between January 2014 and April 2015, Pullstrom from Stadtwerke Klagenfurt, E-DI from schlaustrom, Max Energy (a private German energy supply utility), and aWATTar, an Austrian firm offering products for customers with smart meters, all entered the market.

Households in Vienna, Lower Austria and Burgenland had a choice of up to 55 electricity products[3], compared with around 44 in the previous year and 35 in the year before that. The largest regional suppliers offer six to eight different products. Even in Vorarlberg, where choice is significantly narrower, the number of products available increased from 33 to 44. The number of electricity supply tariffs available to small business varies between 30 and 43 depending on location – a smaller range of products than that offered to household consumers.

POTENTIAL SAVINGS IN ELECTRICITY COSTS, EUR/y (households, 3,500 kWh/y)

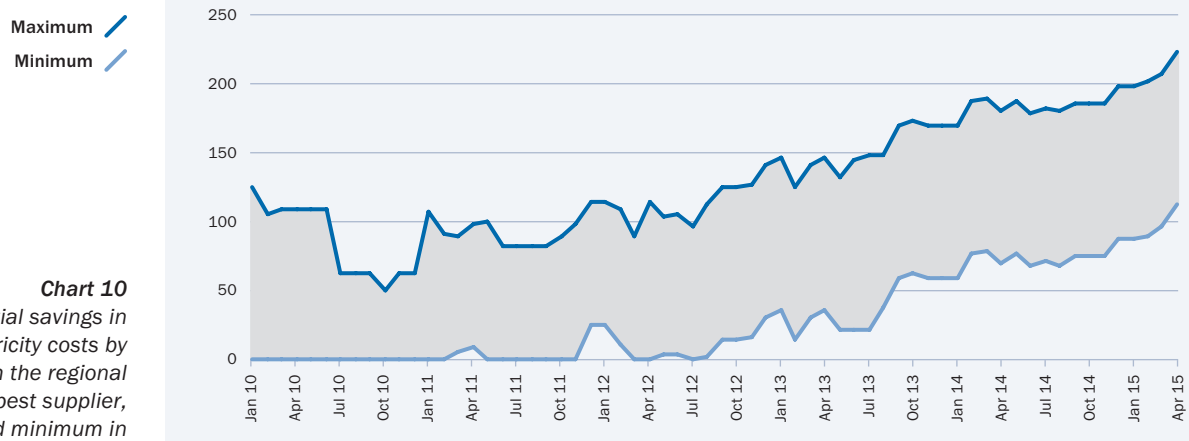


Chart 10
Potential savings in electricity costs by switching from the regional to the cheapest supplier, maximum and minimum in Austria as a whole, over time

Source: E-Control tariff calculator

[3] E-Control Tariff Calculator, April 2015

Almost half of suppliers offer new customer discounts. For households, these discounts can amount to 54% of total energy costs; for a typical household this translates to a cost reduction of EUR 145.

Most of the discounts are between EUR 30 and EUR 50 annually, and are offered as part of a range of different promotions – not only as flat-rate discounts but also in the form of free days of supply, e.g. 30 days, four months, etc.
The potential saving as a result of switching from the standard product offered by the regional supplier to the cheapest alternative supplier has risen continuously over the last 12 months (see Chart 10) and hit a record high in April 2015. In Upper Austria, the figure recently reached EUR 227 per year, including the new customer discount (EUR 179 without the discount).

For companies in Upper Austria with consumption of 30,000 kWh, switching from the regional supplier to the cheapest alternative provider generated savings of up to EUR 1,715 a year; for consumption of 100,000 kWh the annual savings were as high as EUR 5,720 (including new customer discount).

At the beginning of April 2015 the household energy price offered by the cheapest supplier in most regions was 3.45 cents/kWh including a new customer discount (Pullstrom), which was significantly lower than the cheapest offer

CONSUMER ENERGY PRICES AND EEX YEAR-AHEAD FUTURES PRICES
YEAR-AHEAD in cents/kWh

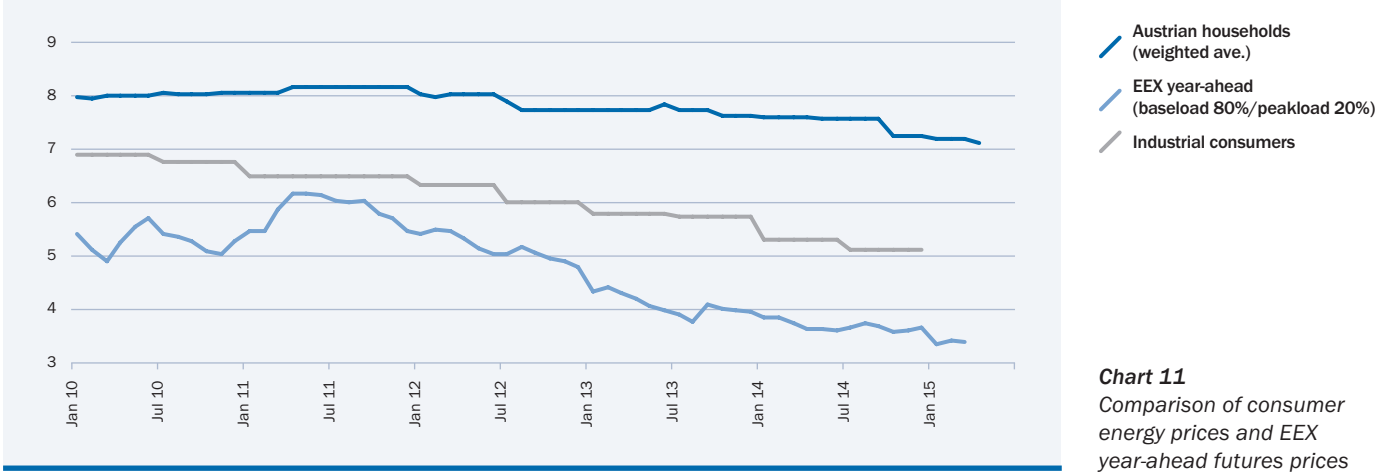


Chart 11
Comparison of consumer energy prices and EEX year-ahead futures prices

Sources: E-Control tariff calculator, E-Control industrial price survey, EPEX/EEX

a year earlier, of 4.45 cents/kWh (Verbund). During the same period, the weighted energy price in Austria fell from 7.58 cents/kWh to 7.11 cents/kWh. Prices for industrial consumers mirror wholesale prices (on the EEX and EPEX) and fell from 5.31 cents/kWh to 5.12 cents/kWh during 2014.[4]

On the back of the success of the previous year's campaign, the Verein für Konsumenteninformation (Austrian Consumers Association, VKI) relaunched its Energiekosten-Stop campaign at the beginning of 2015. In 2014, 68,000 households changed electricity provider and 30,000 changed their gas supplier within the programme; for 70% of these consumers, it was the first time they had switched. The best bidders in the first promotion were stromdiskont and goldgas. Significantly fewer consumers registered for the second campaign than in the previous year – 48,410 as compared to 260,000. This allowed a wider range of suppliers to take part in the auction. The winners of the bidding process were oekostrom (electricity), Montana (eastern gas region) and Gutmann (western gas region). Both electricity and gas products were offered with prices guaranteed or fixed for one year, and without new customer discounts. Consumers could sign up for contracts until 31 May 2015.

2014 was a record year for switching in Austria, with 3.5% of households changing supplier (see Table 5). The figures confirm that competition in the market has increased, signified by high potential savings, a greater range of available products and new market entrants. The VKI Energiekosten-Stop campaign played a significant part in the high switching rate among households.

ELECTRICITY – SWITCHING RATE AND NUMBER OF METERING POINT TRANSFERS

Consumer category	2013		2014		Change 2014/13
	No. of transfers	Switching rate	No. of transfers	Switching rate	Switching rate
Households	73,525	1.70%	159,476	3.70%	116.9%
Other small consumers	31,627	2.00%	44,814	2.80%	41.7%
Load metered	3,560	9.70%	1,916	5.20%	–46.2%
Total T	**108,712**	**1.80%**	**206,206**	**3.50%**	**89.7%**

Table 5
Switching rate and number of metering point transfers

Source: E-Control

[4] Average prices from the E-Control industrial price survey

The large number of consumers changing supplier is also evidence of the growing awareness that switching is not difficult. This was also confirmed in a survey of 1,000 customers conducted for E-Control by Peter Hajek.

83% of those surveyed were either satisfied or very satisfied with how simple it was to switch, with about 60% giving the highest approval rating and saying that the changeover was easier than they had expected. More than half of the respondents changed electricity or gas supplier via the internet (by filling in an online form or returning the signed contract by e-mail).

The proportion of industrial consumers switching supplier was far lower in 2014. However, the switching rate is not a definitive indicator of the level of competition in this sector, since large enterprises do not necessarily need to change supplier in order to secure lower energy prices.

In a comparison of prices in EU member states[5], Austria remained in tenth place, meaning that it is one of the countries with higher household electricity prices. This group also includes Belgium, Germany, Italy and Spain (see Chart 12). In 2014[6] the electricity price fell by 1.5%, in the Netherlands it came down by 9.6%, in Belgium by 7.8%, and in

COMPARISON OF EUROPEAN HOUSEHOLD ELECTRICITY PRICES, cents/kWh

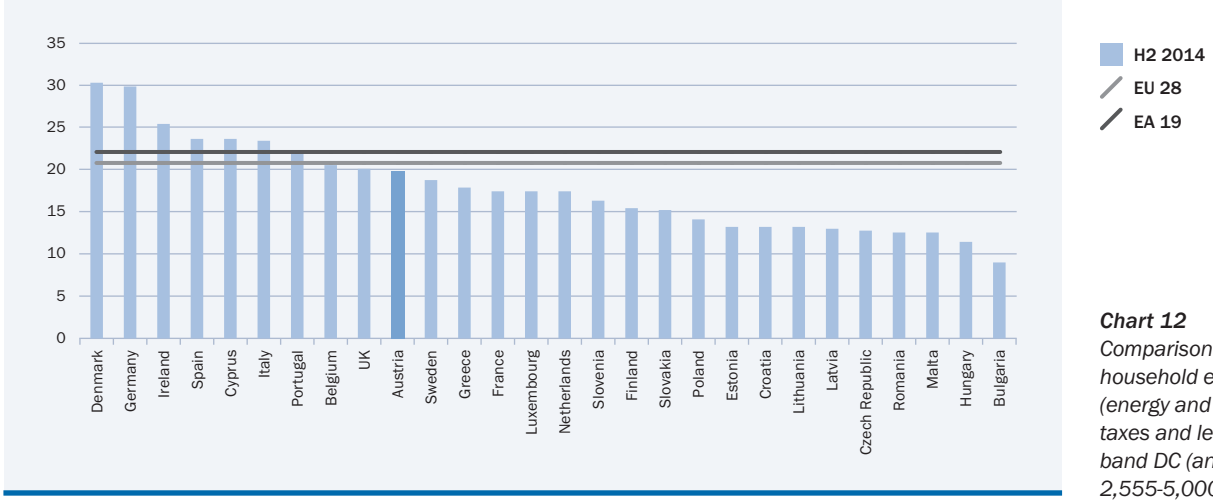


Chart 12
Comparison of European household electricity prices (energy and system charges, taxes and levies), consumer band DC (annual demand of 2,555-5,000 kWh), H2 2014

Source: Eurostat, status 7 May 2014

[5] Eurostat price comparison of the 28 member states; price of electricity for households includes energy price, system charges, taxes and levies.

[6] Eurostat conducts price surveys twice a year. The analysis shown is based on a comparison of electricity prices in the second half of 2013 and the second half of 2014.

the Czech Republic by as much as 14.7%. In Germany, prices rose by 1.8%, and they jumped by 10% in France. The biggest rise in prices, at 12%, occurred in the United Kingdom.

PROBE OF ELECTRICITY SUPPLIERS

In light of the significant fall in wholesale prices of around 35% between 2008 and 2012, and the 10% rise in household electricity prices in the same period, E-Control initiated a market probe pursuant to section 21(2) E-Control Act in conjunction with section 34 E-Control Act and section 10 Electricity Act 2010. At the end of 2013 and the beginning of 2014, a total of 21 suppliers were requested to provide E-Control with data on the revenue and cost structures of their electricity retailing operations broken down by product and customer group. Almost all of the companies applied for and were granted an extension of the deadline for supplying the data, from January 2014 to February 2014. After adjustments and corrections prompted by E-Control's data plausibility checks, the final data sets were submitted to the regulator at the end of May 2014.

The investigation shows that the trend in prices for the mass and the industrial markets is reflected in suppliers' revenues. The difference between revenue from customers in the households and small business segment, and revenue from industrial consumers (with annual consumption of over 100,000 kWh) increased steadily between 2008 and 2012, reaching EUR 12/MWh, meaning that suppliers could generate this much more revenue per MWh from the mass market segment. While revenue from household consumers was just 3% greater than that from large businesses per MWh supplied in 2008, the figure climbed to 19% in 2012. This suggests that competition is less vigorous in the mass market segment. Procurement costs varied widely between the different suppliers.

Detailed analysis showed that procurement was generally not conducted on the basis of long-term contracts to any unusual extent. A number of suppliers procured electricity at closer to market prices, and as a result were better placed to take advantage of low prices on the wholesale market. As was evident from the analysis of revenues, in many cases these low prices were not passed on to mass-market consumers. In contrast to the picture presented by revenues, the difference in procurement costs in the industrial and the mass market segments was relatively small, at EUR 3/MWh. The differences between the various suppliers' retail costs were so great that analysing costs in Austria as a whole was not meaningful. It was also not possible to gain an impression of the impact of economies of scale on companies' total sales.

Due the variations in retail expenses, the margins reported by suppliers also varied

sharply. Although by international comparison very high margins of up to 19% were recorded in some cases, other companies' electricity marketing operations resulted in significant losses.

This meant that average annual margins across all suppliers were negative between 2008 and 2010. But although the average margin was -8.6% in 2009, it stood at 7% in 2012. In the more strongly contested industrial sector, companies achieved more consistent margins of between -1.3% and 1.7%.

But each supplier's overall profitability (e.g. EBIT) was significantly higher than profitability in the electricity supply business. For some companies, their own data suggest that selling electricity to households and businesses is less profitable than other operations, for instance generation, or retailing other products like district heating. There are numerous possible explanations for the differences in the data supplied and in business results, such as difficulty and inconsistency in allocating costs within a company and between customer groups, or internal charging of procurement costs, or even the lack of competitive pressure.

In a market with more intense competition, internal charging of the opportunity costs of using generating plants – which could for example be aligned with the most expensive hours on the wholesale market – to the sales operation would be complicated because sales would have no way to compete with other suppliers given this cost disadvantage. However, within the company, the negative margins would be balanced out by earnings from other operations. If the companies that do not need to buy significant quantities of electricity on the market are eliminated from the sample, the crisis years of 2009 and 2010 become clearly visible. But companies that buy in most of their electricity recorded significantly higher unweighted margins in 2011 and 2012, at 6.5% and 11.8% on average respectively.

All in all, close observation of margins needs to continue in the coming years. The further decline in wholesale prices since 2012 should be reflected in significantly lower procurement costs, especially between 2013 and 2016. In that period in particular it should become clear whether reductions in costs that have already been passed on to industrial consumers also result in lower prices for households and small and medium-sized enterprises. The full report can be found on the E-Control website.

POWER LABELLING[7]

All suppliers of electricity to end users in Austria are legally obliged to inform customers of the mix of primary energy sources used to generate power. Power labelling in Austria is based on guarantees

[7] Note: At the time of preparation of the 2015 Market Report, power labelling data were still at the final editing stage. Marginal deviations from the final findings published in the 2015 power labelling report are possible.

Table 6
Margins excl. generators

MARGINS EXCL. GENERATORS, %	2008	2009	2010	2011	2012
Annual consumption ≤ 0.1 GWh	2.1 (3.3)	–0.1 (6.2)	–0.2 (7.1)	6.5 (6.5)	11.8 (4.2)
Annual consumption > 0.1 GWh	–0.3 (5.3)	–1.2 (4.9)	–1.6 (4.9)	0.3 (3.6)	1.1 (2.6)

Source: E-Control Probe of Electricity Suppliers, 2014

Note: Unweighted arithmetic mean, standard deviation in parentheses. Extreme outliers were eliminated. Companies that reported high negative margins in individual years covered by the investigation, but that reported positive earnings overall, were also excluded (see RZ[61]).

of origin. E-Control monitors the issuing, transmission and cancellation of guarantees, as well as checking that power labelling is correct. E-Control also carries out an annual audit of suppliers subject to the statutory power labelling obligation, and publishes the results in its power labelling report.

In the course of this year's audit, E-Control collected information on some 84.45% of the 67 TWh of electricity supplied from the public grid to consumers.[8] Power labelling for Austria as a whole was calculated on the basis of the data collected. The amount of electricity from renewable sources rose in comparison to the previous year, from 78.6% to 89.1%. The share generated by fossil fuels fell from 14.4% to 10.4%, and the amount contributed by other primary energy sources also fell slightly, from 0.27% to 0.26%. The proportion of electricity of unknown origin also dropped, from 6.8% to 0.27%, due to the prohibition of electricity from unknown sources applicable from 1 January 2015, which was observed by all suppliers. The figure of 0.27% results from financial years that are out of step, meaning that there were overlaps between the reporting period and companies' financial years, whereby a small amount of energy of unknown origin supplied previously needed to be included in the 2014 figures.

The majority of the guarantees of origin for power labelling – 69.11% (2013: 73.10%) – came from Austria. Imported guarantees of origin came from an even wider range of

[8] Note: The total demand figure is the annual value from E-Control's statistics. 100% of total demand cannot be reported due to financial years that do not match the reporting period, and the fact that withdrawal from pumped storage power stations is captured differently in the methodology used for power labelling.

countries than in the previous year, and the largest proportion of foreign guarantees continued to be from Norway.

Average environmental impacts of consumed electricity were 58.04g/kWh of CO_2 (2013: 103.33g/kWh) and 0.002mg/kWh (2013: 0.05mg/kWh) of radioactive waste. The marked fall in CO_2 emissions is principally due to the removal of electricity of unknown origin, as well as the lower use of fossil-fuel-based guarantees of origin.

There was another sharp rise in the number of suppliers offering electricity from purely renewable sources. There were 107 such providers in 2014[9], while in 2013 there were 81 – meaning that within a single year, 25 suppliers either changed to delivering green electricity only or entered the market on this basis. Total supply by renewable energy suppliers (including provincial energy utilities that offer green electricity exclusively) amounted to 30,456 GWh (2013: 17,412 GWh). This significant jump is explained by the fact that a number of large suppliers shifted to an energy mix consisting entirely of green power products.

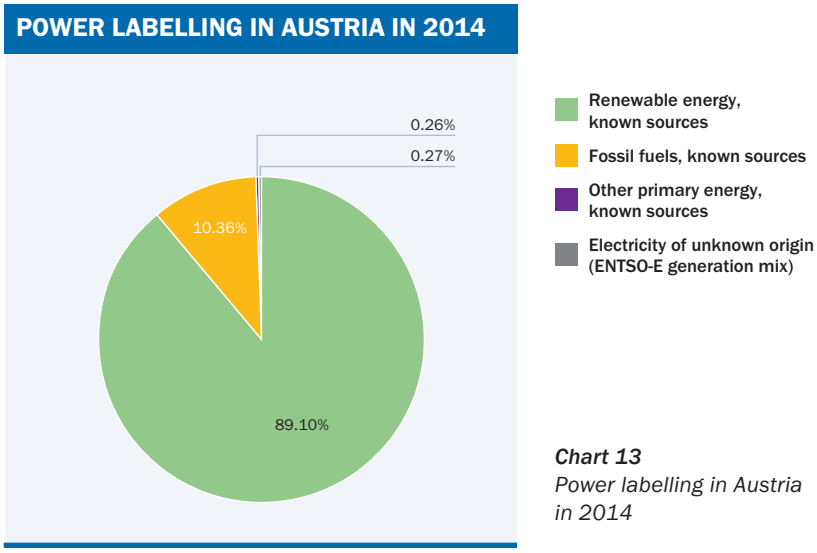


Chart 13
Power labelling in Austria in 2014

Source: E-Control guarantee of origin database

[9] It should be noted that there may be more (new) green power suppliers in the market that did not submit power labelling documentation for auditing in 2014.

THE GAS MARKET

Network regulation

While regulation of gas TSOs is still based on cost audits, a stable, long-term incentive regulation system for gas distribution system operators has been in place since 2008. The regulatory framework was modified slightly for the second incentive regulation period for distribution system operators, which runs from 1 January 2013 to 31 December 2017, and the charges for 2013 were set using the adjusted system for the first time. The efficiency target for the end of 2017 remains in place, but the cost trajectory for the second period was "reset" on the basis of the 2011 audited cost base and of target attainment. As with the electricity sector, the regulatory system was set out in two papers that formed the basis of a public consultation, which was followed by discussions with industry representatives. Appeals were lodged against a number of cost decisions, which again reflected events in the electricity industry. The complaints largely corresponded to those which are still pending at the Federal Administrative Court.

The regulation parameters for the current incentive regulation period required the system operators to cut their costs by between 2% and 5%, depending on their relative efficiency. These cost reductions were reflected in the

CHANGES IN GAS SYSTEM CHARGES FOR TYPICAL CONSUMERS, 90,000,000 KWH, 7,000 H, GRID LEVEL 2, cents/kWh

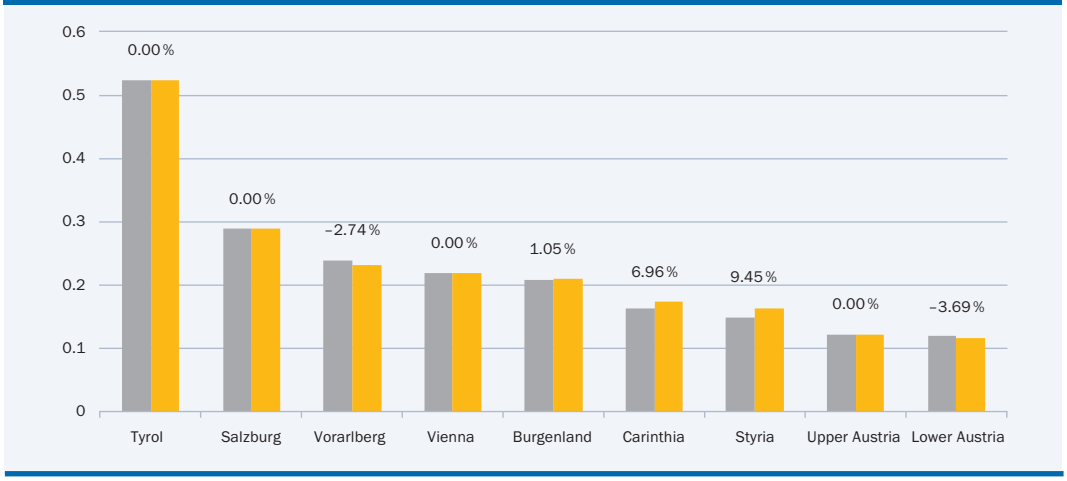


Chart 14
Changes in gas system charges for typical consumers, grid level 2

Source: E-Control

Gas-Systemnutzungsentgelte-Verordnung – Novelle 2015 (2013 Gas System Charges [Amendment] Ordinance 2015), leading to a drop in charges and in turn to lower costs for customers in the majority of grid zones (Upper Austria, Lower Austria, Vienna and Vorarlberg). However, sharp increases were necessary in the Styria and Carinthia grid zones. The adjustments in Styria were chiefly necessitated by spending on the Südschiene pipeline, coupled with the significant drop in sales due to the bleak market situation facing gas-fired power stations. Charges in Carinthia were adjusted in response to two key factors: the reconciliation of decreased revenues and non-influenceable costs led to a rise in expenses directly attributable to the grid zone, while cost cascading meant that higher expenses were rolled over on to the Carinthia grid zone from grid level 1. The charts below illustrate the evolution of charges in the various grid zones.

The 2015 amendment to the Gas System Charges Ordinance 2013 included, for the first time, a special charge for participants on in the electricity balancing market. This is designed to prompt an increase in supply on the electricity balancing market. The charge applies only to days on which gas is withdrawn from the network due to the use of balancing energy (positive balancing energy, injection or reduced offtake of electricity to/from the grid).

CHANGES IN SYSTEM CHARGES, 15,000 KWH, GRID LEVEL 3, cents/kWh

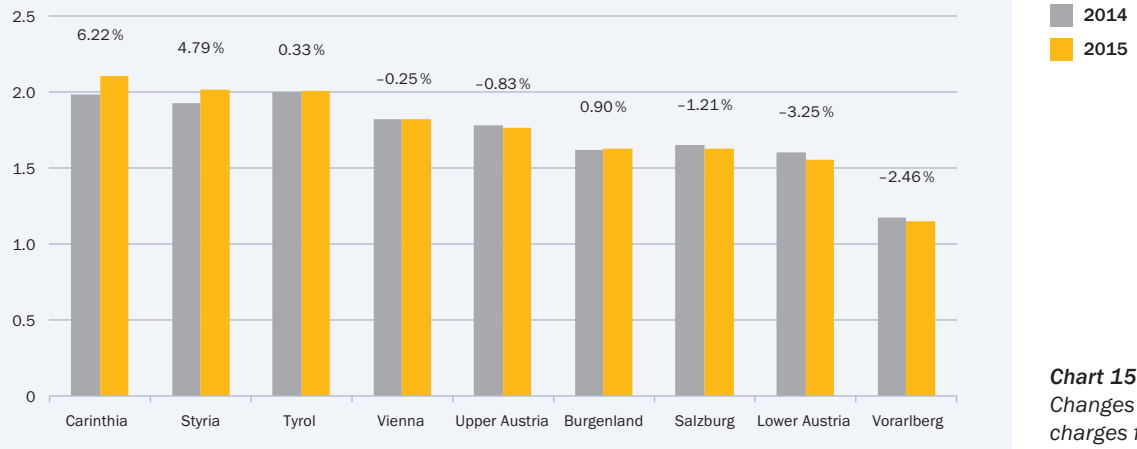


Chart 15
Changes in gas system charges for typical consumers, grid level 3

Source: E-Control

Application of a daily capacity charge prevents a single call-off of balancing power from determining the billing capacity for gas system utilisation charges for an entire month. This would make calculations for offers on the physical balancing energy market extremely complicated, requiring the price to reflect probable call-offs that might have a high impact on costs. The grid level 3 charge is set on the basis of the approach used to determine the daily capacity charge, while the method outlined in the 2014 amendment to the Ordinance is used for the grid level 2 charge. Billing is based on the highest hourly load recorded on the day of the call-off of balancing energy.

Market mechanisms

NEW GAS MARKET MODEL

Transposition of the third energy package by the *Gaswirtschaftsgesetz* (Natural Gas Act) 2011 has brought major changes in transmission network access. With the introduction of the new gas market model on 1 January 2013, the previous system of capacity reservations based on contractually

MAM, DAILY BALANCING – PURCHASES, MWh

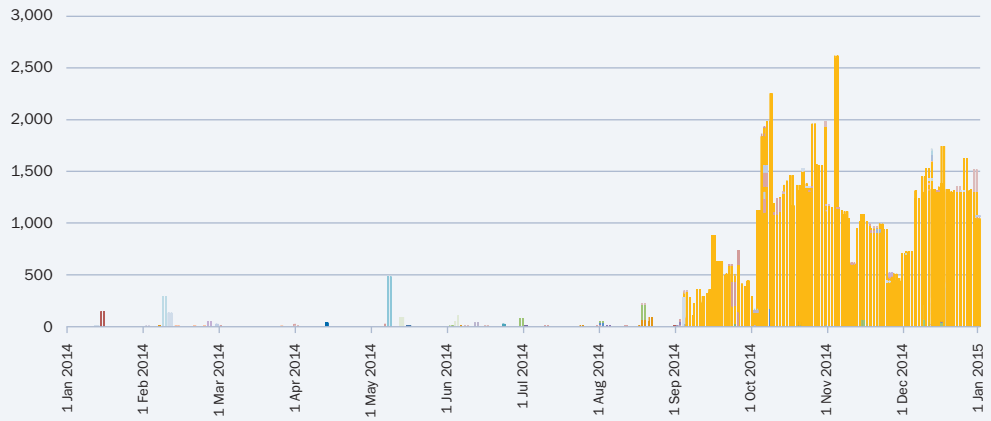


Chart 16
Market area manager's daily balancing energy purchases

Source: Market area manager

agreed transport routes was replaced by an entry-exit model, under which capacity – including transportation to and from the virtual trading point (VTP) – is separately booked and traded at entry and exit points. The VTP is not assigned to any physical entry or exit point, and market participants can buy and sell gas there without making transport capacity reservations.

As well as transmission system access, there was also an important change in relation to balancing systems, with the introduction of a daily balancing regime. In the course of balancing at the market area level, the market area manager (MAM) balances the daily deviations for each balance group, and a balancing incentive markup is used as an incentive to avoid hourly deviations. The overall aim is to keep balancing energy at the market area level to a minimum and to ensure that balance responsible parties (BRPs) fulfil their responsibilities within their particular balance group.

The charts show that on the whole, BRPs do make every effort to meet their obligation to balance supply and consumption in their respective balance group. However, in the third quarter of 2014 there was a significant increase in the quantity of balancing energy required, in particular in volumes procured by the market area manager on the gas exchange on behalf of and for the account of BRPs. This may have been due to the reduction in Russian gas supplies to Europe from the

MAM, DAILY BALANCING – SALES, MWh

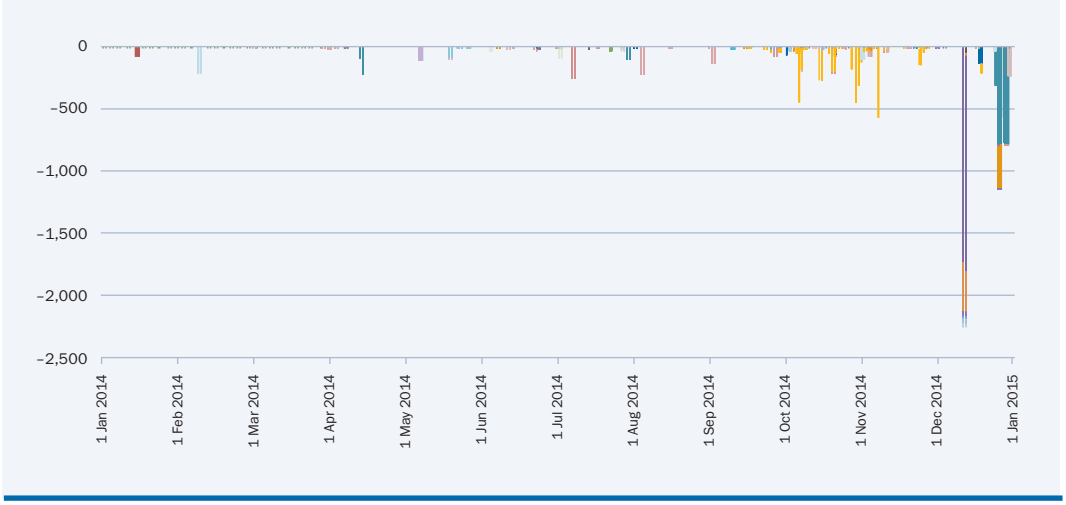


Chart 17
Market area manager's daily balancing energy sales

Source: Market area manager

beginning of September onwards. The effects of regulatory intervention in neighbouring markets also have an impact on market area balancing in the eastern market area.

Balancing at distribution level is the responsibility of the clearing and settlement agent and the distribution area manager (DAM). Daily balancing is applied for biogas injections and for consumers that have concluded a contract with the system operator for gas flows with a maximum capacity of up to 10,000 kWh/h at the cross-border interconnection points in the eastern distribution area ("local border traffic"). Consumers with a contractually agreed maximum capacity of over 50,000 kWh/h are subject to hourly balancing. Consumers with a contractually agreed maximum capacity of between 10,000 kWh/h and 50,000 kWh/h can choose between daily and hourly balancing each year, with the latter requiring them to implement an online metering system in accordance with the distribution area manager's requirements.

The charts show that there was substantial oversupply in the eastern market area and in the Tyrol and Vorarlberg market areas in western Austria just after the changeover to the new market model.

PHYSICAL BALANCING ENERGY CALL-OFFS IN THE EASTERN MARKET AREA, MWh

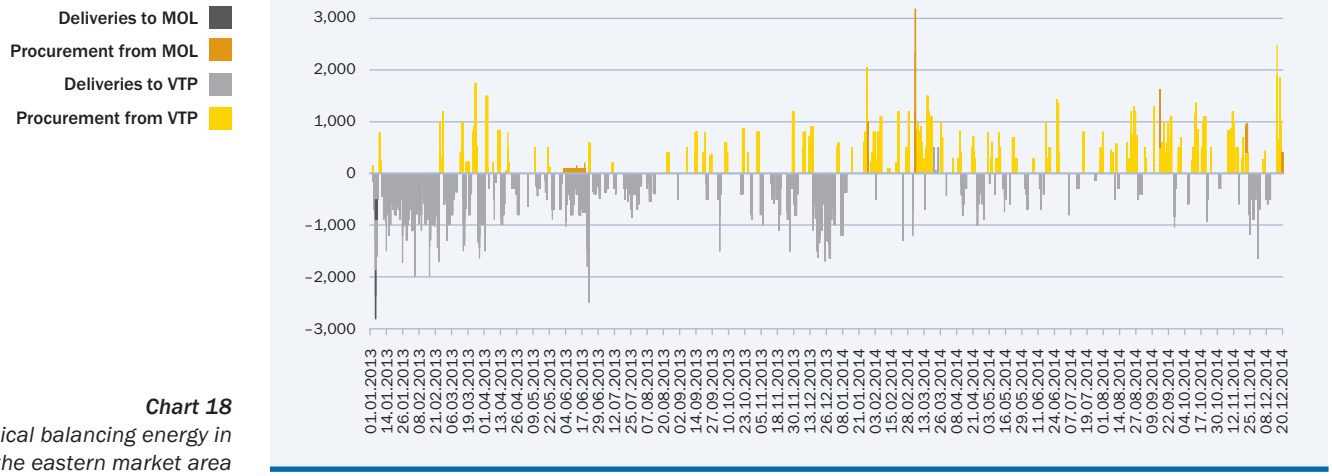


Chart 18
Physical balancing energy in the eastern market area

Source: Distribution area manager

In the eastern market area this was mainly the result of asymmetrical pricing in the clearing and settlement agent's hourly balancing regime; lower, symmetrical prices were implemented on 1 April 2013. The peaks in balancing energy call-offs and the corresponding spikes in indexed balancing energy prices were attributable to short-term capacity bottlenecks in the system, which were covered by call-offs from the merit order list (MOL) at certain locations by the clearing and settlement agent. However, sufficient balancing energy for the distribution area was procured by means of trading on the gas exchange at the VTP.

Charts 20 and 21 show that balancing energy costs were down significantly on the previous year, especially in summer 2014. As balancing energy is predominately purchased on the exchange, this decline was due to lower wholesale prices. The price peaks, in particular in demand-side prices for balancing energy procured for daily balancing purposes, were the result of call-offs from the MOL. This was especially pronounced on 3 February 2014, when the market was suspended owing to technical problems and energy was called off from the MOL at prices of up to EUR 70/MWh.

The benchmark exchange price (see Chart 20) is used to calculate the balancing energy costs

PHYSICAL BALANCING ENERGY CALL-OFFS IN THE TYROL AND VORARLBERG MARKET AREAS, MWh

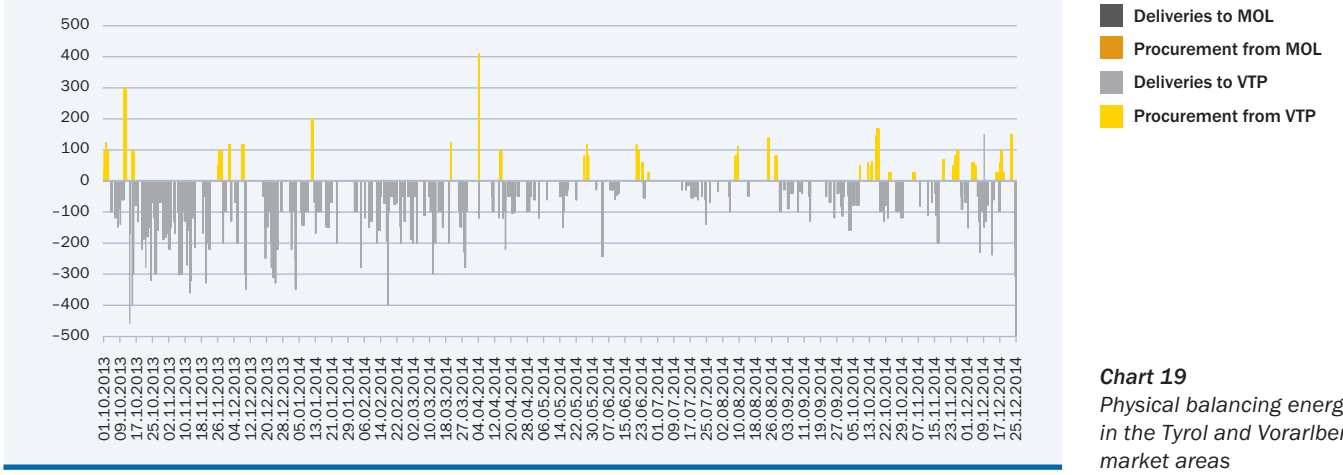


Chart 19
Physical balancing energy in the Tyrol and Vorarlberg market areas

Source: Distribution area manager

for biogas facilities that inject energy into the system, as well as for local border traffic and for system operators' special balance groups for system losses and own consumption. In this connection, a change came into effect in the Tyrol and Vorarlberg market areas in October 2014. Daily balancing was replaced by hourly balancing for local border traffic passing through the market area.

The new market model has helped to stimulate competition by implementing the entry/exit system and introducing daily balancing. In spite of some companies leaving the segment, the number of virtual wholesalers had risen to 93 by the end of 2014. The number of balance responsible parties in the market areas has also risen steadily – there were 85 in the eastern market area and a total of 19 in the Tyrol and Vorarlberg market areas as of end-2014.

Although implementation of the new market model was preceded by a detailed development and consultation process, the changes to operational clearing and settlement procedures as well as insights gained by E-Control in the course of its monitoring activities have necessitated adaptations of the gas market model. These are taken into account and implemented by means of amendments to the *Gas-Marktmodell-Verordnung* (Gas Market Model Ordinance) 2012 and to the system operators' general terms and conditions.

BALANCING ENERGY PRICES FOR DAILY BALANCING IN THE EASTERN MARKET AREA, EUR/MWh

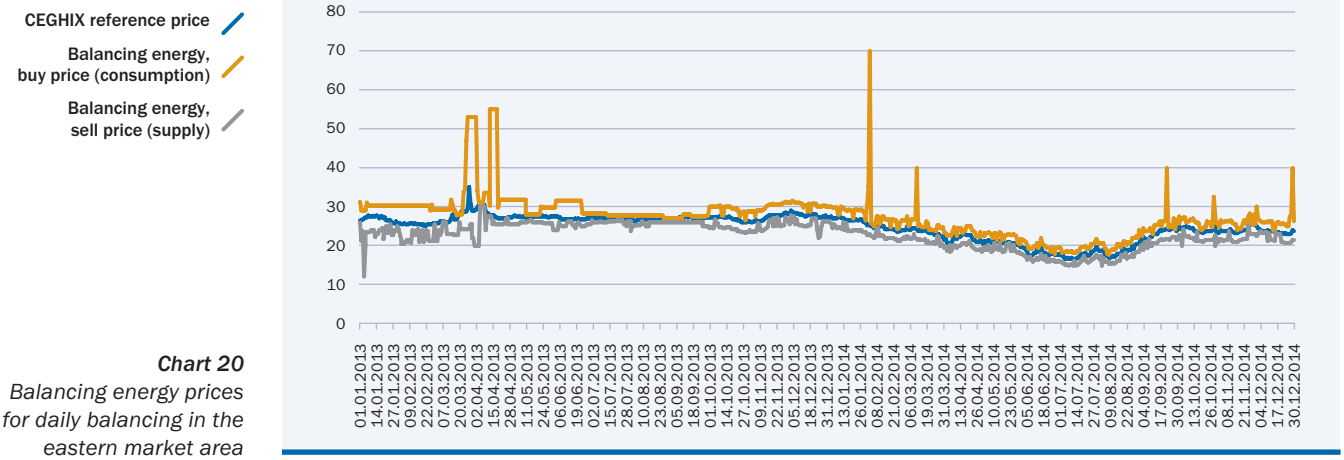


Chart 20
Balancing energy prices for daily balancing in the eastern market area

Source: AGCS

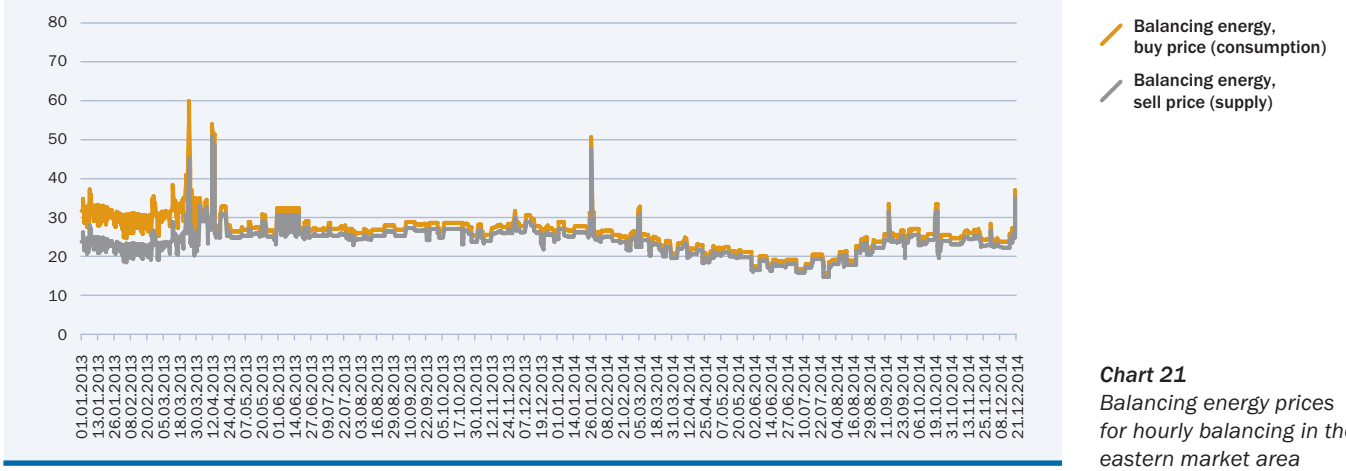
The price incentives for consumers subject to hourly balancing have been reduced, the thresholds for the various levels of the balancing incentive markup applied in market area balancing have been adjusted and the rules for system access for storage system operators (SSOs) have been expanded. The renomination restrictions that form part of the congestion management mechanism have also been clarified.

On the whole, the new gas market model is working effectively in Austria's three market areas (east Tyrol and Vorarlberg) and has created long-term added value for the country's gas market. However, some market participants find the model relatively complex and that it involves extensive communication, which is probably attributable to the many different roles under the system.

STORAGE MARKET

Access to gas storage systems is governed by sections 97 et seq. Natural Gas Act 2011, with negotiated third-party access prescribed by section 98(1) of the Act. However, section 98(2) requires E-Control to prepare and publish a report on the Austrian flexibility and storage market every three years, or at the request of a storage system operator or a party entitled to access to storage. Section 98(2) establishes criteria for assessing the intensity of competition on the storage market, including price comparisons, the range of products on offer and their take-

BALANCING ENERGY PRICES FOR HOURLY BALANCING IN THE EASTERN MARKET AREA, EUR/MWh



Source: AGCS

Chart 21
Balancing energy prices for hourly balancing in the eastern market area

up, and market concentration. The Federal Ministry of Science, Research and Economy must take this report into account when deciding whether to allow negotiated or regulated access to storage capacity.

Storage charges are set by the SSOs and may not exceed the average charges for comparable services in other EU member states by more than 20%, otherwise the regulator may determine the cost base for storage pricing (section 99[2]). All storage contracts have to be submitted to E-Control (section 101 Natural Gas Act 2011).

Thanks to the newly introduced legal framework that sets out the rules for monitoring and transparency, the 2014/15 report on the Austrian flexibility and storage market includes more detailed analysis based on improved data. The transparency requirements of Article 19 Regulation (EC) No 715/2009 for storage facility operators came into effect on 3 March 2011. The *Gas Monitoring-Verordnung* (Gas Monitoring Ordinance), which covers the storage industry and obliges SSOs to provide data, entered into force on 1 March 2013.

UNBUNDLING OF STORAGE SYSTEM OPERATORS

As a result of the transposition of Article 15 Directive 2009/73/EC into national law, all SSOs that are part of a vertically integrated gas company must be independent of other corporate activities not related to transmission, distribution and storage, in terms of legal form, organisation and decision-making (section 107 Natural Gas Act 2011). In other words, storage companies must carry out legal and organisational unbundling. The independence of SSOs must be ensured in a number of ways, including by means of a legal spin-off from the vertically integrated gas undertaking, as well as in terms of resource allocation, the ability of management to act independently, the adoption of a compliance programme and the appointment of a compliance officer (section 107(1) and (2) Natural Gas Act 2011), and the confidential treatment of commercially sensitive information (section 11 Natural Gas Act 2011). Storage companies are also subject to the non-discrimination requirements outlined in section 9 Natural Gas Act 2011. Improvements in all of these respects are continuously assessed by the regulator by means of the annual compliance report.

The ownership of Austria's SSOs after unbundling was as follows:

- OMV Gas Storage GmbH (OGS) is a fully-owned subsidiary of OMV Gas & Power GmbH, which also holds a stake in EconGas GmbH (EconGas; as a gas supplier) and an 80.9% interest in Gas Connect Austria GmbH (transmission system operator).
- RAG Energy Storage GmbH (RES) is fully

owned by RAG AG, which in turn is a wholly-owned subsidiary of RAG-Beteiligungs-Aktiengesellschaft, the owners of which are EVN AG (50.025%), E.ON Exploration & Production GmbH (29.975%), Energie Steiermark Kunden GmbH (10%) and Salzburg AG für Energie, Verkehr und Telekommunikation (Salzburg AG; 10%).

- Astora GmbH & Co KG (Astora) is fully owned by Wingas GmbH, which is a subsidiary of W & G Beteiligungs- GmbH & Co. KG. The owners of W & G Beteiligungs- GmbH & Co. KG are OAO Gazprom (50%) and German oil and gas producer Wintershall Holding AG (50%).
- GSA LLC (GSA) is a subsidiary of OOO Gazprom Export (Gazprom Export), which is fully owned by OAO Gazprom.
- E.ON Global Commodities SE holds all of the shares in E.ON Gas Storage GmbH (EGS). EGS is represented in Austria by a branch office, Gas Storage Austria.

ALLOCATION OF STORAGE CAPACITY

Sections 103 and 104 Natural Gas Act 2011 transpose Articles 17 and 22 Regulation (EC) No 715/2009, which set out the principles of storage capacity allocation mechanisms, congestion management procedures and capacity rights trading for storage facility operators. Capacity allocation procedures must be selected in view of the current capacity situation, and auctions must be held if demand exceeds supply.

As regards congestion management, section 104 Natural Gas Act 2011 requires the storage system operators to set up an overarching secondary capacity trading platform or to cooperate on the creation of a joint platform. Storage service contracts must include clauses designed to prevent capacity hoarding, and unused contracted capacity must be sold to third parties via the secondary market platform in the event of congestion.

Austrian storage system operators allocate storage capacity on a first come, first served basis using published storage charges, and at auctions.

In the past two years, available capacity in Austria (and in other European countries) has mainly been allocated at auctions. Two different price formation mechanisms are applied: fixed prices for a particular storage year (or other period) and flexible prices linked to the summer-winter spread, plus a markup. Flexible prices are normally used at auctions of multi-year storage products. Both methods are applied in Austria.

Since 1 January 2013 storage companies have been required to make an annual booking with the system operator for the maximum injection and withdrawal capacity to be reserved in the following calendar year.

CARTEL PROCEEDINGS

Three cartel proceedings against Gazprom Austria GmbH are still pending at the cartel court. In each case E-Control has accused Gazprom Austria GmbH of adopting restrictive clauses to achieve market foreclosure (Article 102 Treaty on the Functioning of the European Union [TFEU] and section 1 *Kartellgesetz* [Cartel Act] 2005, as well as Article 102 TFEU and section 5 Cartel Act), and of exclusionary and exploitative abuse of a dominant market position (Article 102 TFEU and section 5 Cartel Act).

UNBUNDLING

Following the merger of Baumgarten-Oberkappel GasleitungsgesmbH and Gas Connect Austria GmbH (the acquiring company), and the transfer of one of Gas Connect Austria GmbH's businesses to Trans Austria Gasleitung GmbH, as well as a positive opinion from the European Commission, the remaining transmission system operators – Gas Connect Austria GmbH and Trans Austria Gasleitung GmbH – were certified as independent transmission system operators (ITOs) by way of official decisions V ZER G 01/14 and V ZER G 03/13, both dated 18 July 2014. In the meantime, the ownership of Trans Austria Gasleitung GmbH has changed (with Snam Rete Gas S.p.A replacing CDP Gas S.r.l.), and recertification by the regulator is currently pending.

TRANSPARENCY

Chapter 3 of the annex to Regulation (EC) No 715/2009 of the European Parliament and of the Council on conditions for access to the natural gas transmission networks forms the basis of the disclosure duties of Europe's TSOs.

In Austria, much of this information is generally published by the market area manager via the online platform established pursuant to section 39 Natural Gas Act 2011. E-Control once again assessed the level of compliance with these transparency requirements as part of its supervisory duties pursuant to section 24 E-Control Act.

Broadly speaking, the TSOs' compliance with the requirements is satisfactory, although there is room for improvement in some areas. The TSOs used the regulator's evaluation as an opportunity to improve the disclosure of enhancements to user friendliness. One such measure includes offering information downloads in three different file formats (.xls, .csv, .xml). Regarding the frequency of updates and the timeliness of reporting in general, the TSOs were requested to make greater efforts publish information as soon as it becomes available, and within an hour at most.

GAS NETWORK DEVELOPMENT PLANNING

Pursuant to section 18(1)(11) in conjunction with section 22(2) Natural Gas Act 2011, the distribution area manager (DAM) is responsible for drawing up a long-term plan (LTP) for the development of the distribution pipeline systems specified in Annex 1 of the Act at least once a year. The market area manager (MAM) is obliged to draw up a ten-year coordinated network development plan (CNDP) annually in consultation with the TSOs, in accordance with section 14(1)(7) in conjunction with section 63(1) Natural Gas Act 2011.

Both of these planning instruments must be approved by the regulator, and they must take account of technical and economic expediency, the interests of all market participants and consistency with the Community-wide ten-year network development plan (TYNDP), as well as compliance with the infrastructure standard laid down by Article 6 Regulation (EU) No 994/2010. For this purpose, needs assessments are carried out that may in turn form the basis of specific projects, for which a particular development threshold is usually defined. New capacity is offered on the PRISMA capacity trading platform. There was no firm demand for new capacity in the 2015 yearly auction, meaning that the development threshold was not achieved. According to calculations by AGGM and Gas Connect Austria, the capacity of infrastructure in Austria is 235% of total daily demand during a day of exceptionally high gas demand, which conforms to the statutory infrastructure standard.

Under the Natural Gas Act 2011, the aims of the network development planning instruments include ensuring:

- coverage of the demand for capacity to supply end users, and preparedness for emergency scenarios
- a high level of pipeline capacity availability (adequate infrastructure to maintain security of supply)
- coverage of transportation needs or capacity requirements at entry and exit points on the transmission network and at storage facilities

The LTP not only covers the eastern market area – as provided for in the legislation – but also the Tyrol and Vorarlberg market areas, and thus provides an overview of the total investment required at grid level 1. In 2014, a range of scenarios for sales forecasts were drawn up for the first time. The baseline scenario assumes continued sales growth without the implementation of new power station projects, while the maximum scenario takes into account all registered power station developments. The minimum scenario is based on a steady decline in sales due to strict implementation of the EU Energy Efficiency Directive.

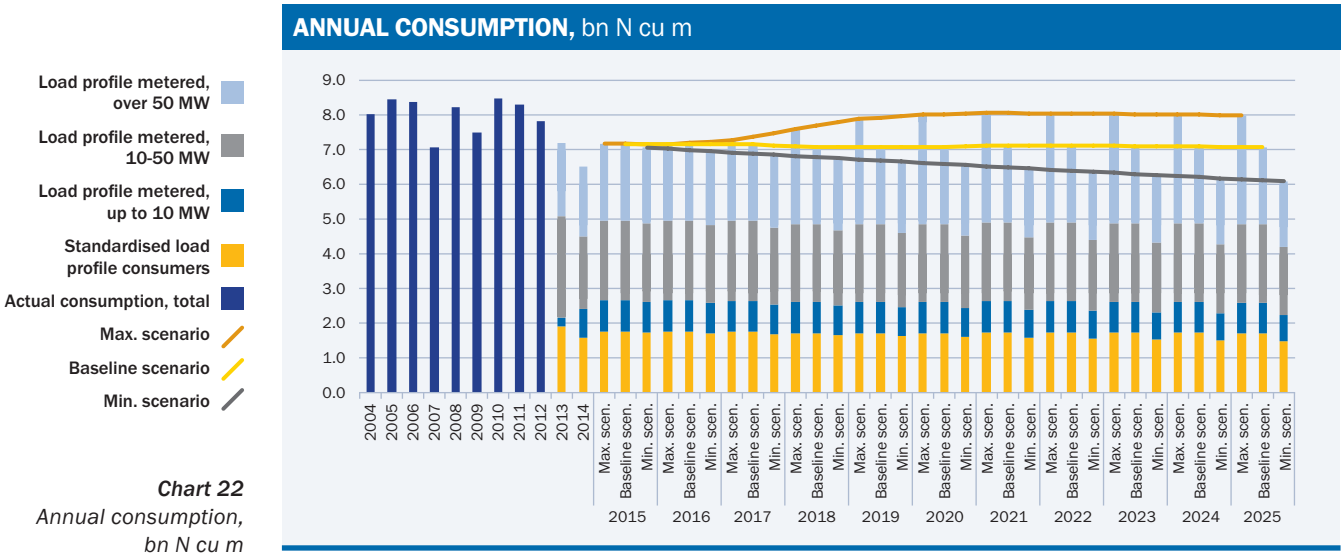


Chart 22
Annual consumption, bn N cu m

Source: AGGM, 2014 LTP

Capacity scenarios were developed for the CNDP in collaboration with the DAM, on the basis of capacity data surveys and the results of selected projects.

E-Control then held consultations to ensure that both the LTP and CNDP took market participants' requirements into account and reflected total investment needs.

INVESTMENTS

In terms of investments by Austrian gas system operators, the priorities remain safeguarding security of supply for domestic demand, as well as promoting market integration and diversification of transportation routes. Following the completion of major projects such as the Westschiene and Südschiene pipelines, investment is now focusing on the distribution network, in particular pipeline connections to storage facilities, and on network replacement and renewal projects. A small number of projects aimed at expanding the network in Austria are also being implemented, but the growing pressure from alternative energy sources (district or local district heating) and energy efficiency requirements is having a major influence on project implementation. Chart 23 below shows the slight change in gross investment compared to past years. Investments in replacement and renewal of

GROSS INVESTMENT IN THE GAS NETWORK, EUR '000

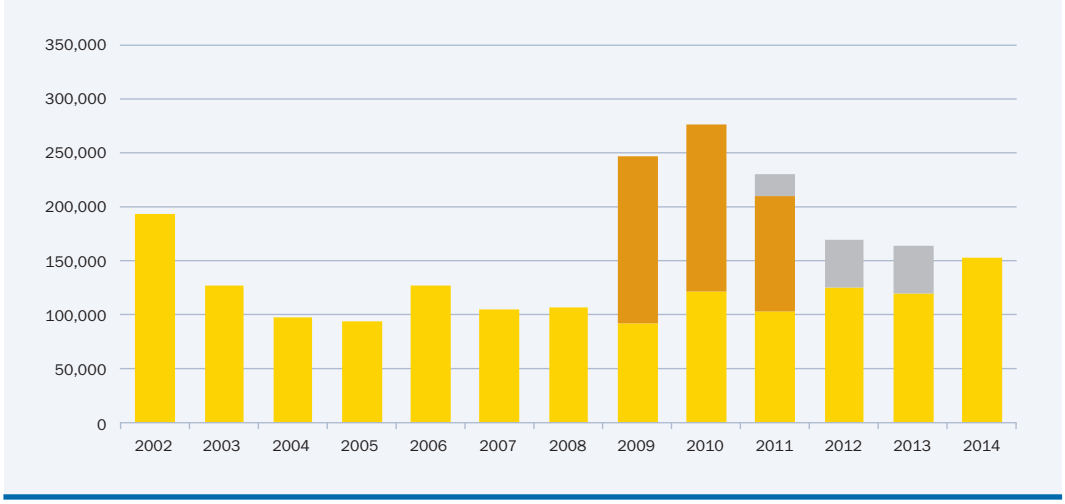


Chart 23
Gross investment in the gas network

Source: E-Control (aggregate company data, 2014 survey; acquisition and production costs, incl. consumer contributions to connection costs)

ageing infrastructure in the gas distribution network are also necessary. For this reason, investment of this kind has increased slightly since 2008, and will need to remain at a similar level in the future. As in the electricity network, the regulator has created the framework required to incentivise essential and efficient investments in the gas network and to guarantee adequate compensation by means of system charges.

SECURITY OF SUPPLY DOMESTIC SUPPLY AND DEMAND BALANCE

Imports account for over 80% of gas supply. Previously, import levels were usually relatively constant, except in summer when additional volumes were required to refill storage facilities. This pattern is increasingly giving way to wider seasonal swings, with imports tending to fall in winter and rise in summer. Reduced imports relative to demand in winter are compensated for by additional withdrawals from storage. Interestingly, thanks to the extensive use of storage capacity, including by international customers, in certain winter months Austria is now a net exporter of gas.

The country has two domestic gas producers, OMV Austria Exploration & Production

AUSTRIAN GAS SUPPLY AND DEMAND BALANCE, GWh

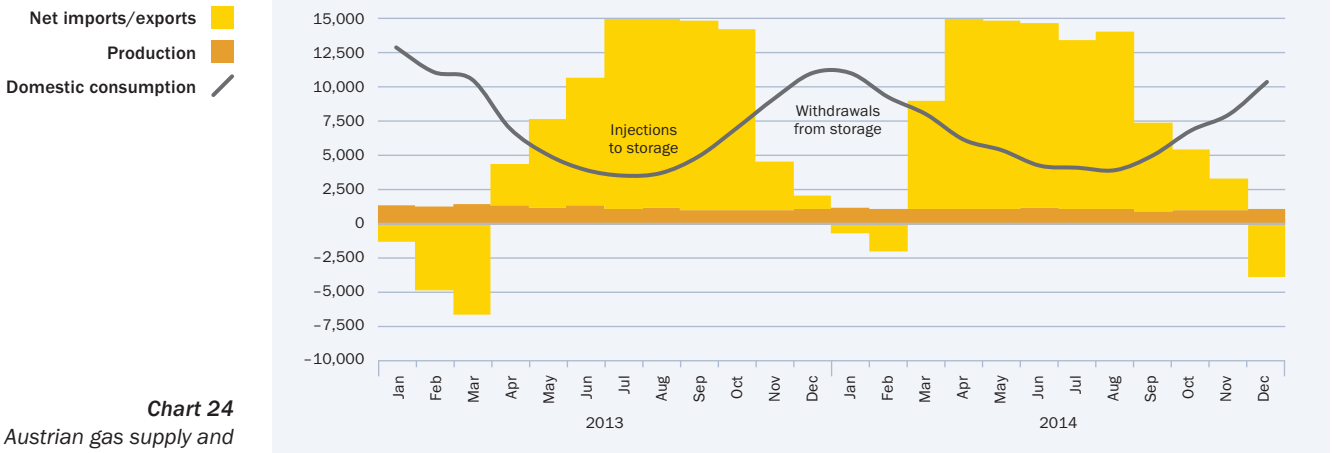


Chart 24
Austrian gas supply and demand balance

Source: E-Control

GmbH and Rohöl-Aufsuchungs AG (RAG). Some 1.18bn N cu m of natural gas was produced in 2014, or about 16% of domestic consumption.

Fluctuations in gas demand are mainly driven by outdoor temperatures and power station use, while industrial demand remains relatively steady. Supplies to households, small and medium-sized enterprises, and large-scale industry are always sufficient, so all in all supply and demand can be seen as well balanced. In 2014 about 82% of all physical gas imports were re-exported. Physical imports totalled some 468 TWh during that year.

GAS SUPPLY SITUATION AND MONITORING IN AUSTRIA

From early September 2014 to the start of March 2015, supplies of natural gas from Russia to Austria and other European countries were subject to intermittent reductions. However, owing to the high storage levels at the beginning of the heating season and low consumption on account of the mild weather, these reductions had no impact on the gas supply situation. Austrian is also in a position to compensate for cutbacks in Russian gas deliveries over longer periods.

During the political crisis between Russia and Ukraine, the EU Commission initiated an

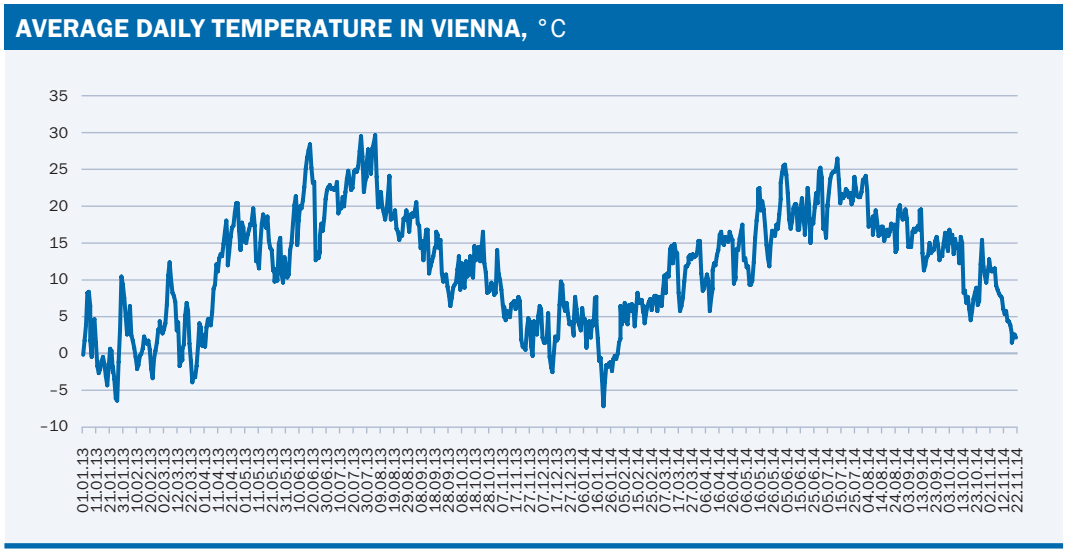


Chart 25
Average daily temperature in Vienna

Source: Central Institute of Meteorology and Geodynamics (ZAMG)

energy stress test (EST) process, requesting member states to assess and evaluate the effects of interruptions to gas deliveries, and to develop appropriate responses for ensuring security of gas supply based on different scenarios. In addition to national assessments, consideration of cross-border effects forms a major part of each country's EST report. The Federal Ministry of Science, Research and Economy was responsible for coordinating preparation of the Austrian report, and E-Control was tasked with drafting it. The regulator and the DAM analysed the effects of various supply disruption scenarios, including cross-border impacts, and outlined measures designed to maintain security of supply in the short and medium term. An extended suspension of gas deliveries from Russia would certainly have a serious impact on supply security in Europe, with eastern member states and members of the Energy Community bearing the brunt. However, the European Commission's report also shows that cooperation between all member states would reduce interruptions of supply to individual countries and safeguard energy supplies.

In Austria, response plans and legal provisions are already in place in case of the emergence of a gas crisis. The Preventive Action Plan is intended to prevent a crisis from occurring

or to contain a crisis if it should occur, while the Emergency Plan describes the procedures and actions to be taken in case of emergency. Both plans, including a detailed risk analysis, were revised and published in 2014, and conformity with the infrastructure standard was calculated and assessed. The infrastructure standard shows that sufficient transportation, production and storage capacity is available to compensate for the interruption of supplies of Russian gas to the largest gas infrastructure (the Baumgarten hub) by reverting to other sources. The standard also specifies the extent to which sufficient capacity is in place to cover the maximum daily demand (occurring with a probability of once in 20 years). The standard does not include a description of contractual relationships, but is rather designed to indicate the quantity of gas that can be technically delivered in the eastern market area, and highlight the options available to suppliers and upstream suppliers to compensate for supply interruptions.

In addition to these provisions, the energy market is monitored on an ongoing basis by the regulatory authorities. In order to ensure the submission of data required for early recognition of an impending crisis, E-Control issued the *Energielenkungsdaten-Verordnung* (Energy Intervention Data Order) 2014, which obliges market participants to provide the regulator with the data needed to monitor the gas supply situation. E-Control uses the data to compile detailed analyses, enabling it to identify signs of gas supply bottlenecks and initiate responsive measures at an early stage.

In 2014 E-Control also assessed compliance with the supply standard. Under Article 8 Regulation (EU) No 994/2010 (the SoS Regulation), suppliers are obliged to guarantee a specified standard of supply to protected customers as defined in Article 2 of the Regulation. In Austria, only household consumers are defined as protected, as the country decided not to extend the definition to other consumer groups.

The Regulation states that supply must also be guaranteed in the following cases:

a) Extreme temperatures during a seven-day peak period occurring with a statistical probability of once in 20 years
b) Any period of at least 30 days of exceptionally high gas demand, occurring with a statistical probability of once in 20 years, and
(c) For a period of at least 30 days in case of the disruption of the single largest gas infrastructure under average winter conditions.

E-Control has not specified any requirements as to the means by which gas is procured for household consumers, although supplies for

a particular heating period must be procured for a period of six months on the basis of fixed contracts. In the course of a survey, suppliers of household consumers are required to prove that they have sufficient supplies in order to provide their customers with energy during the aforementioned extreme situations during the winter months.

Competition on the wholesale market

Prices on the CEGHIX spot index were significantly lower in 2014 than in the preceding two years. The mild winter of 2013/14 led to a drop in demand for gas and the benchmark price began to fall at the beginning of February 2014. In contrast to the seasonal trend, Austrian gas storage levels rose by 10% in March 2014 (source: GSE); they usually begin to increase in mid-April. The combination of oversupply and

CEGHIX DAY-AHEAD MARKET, EUR/MWh

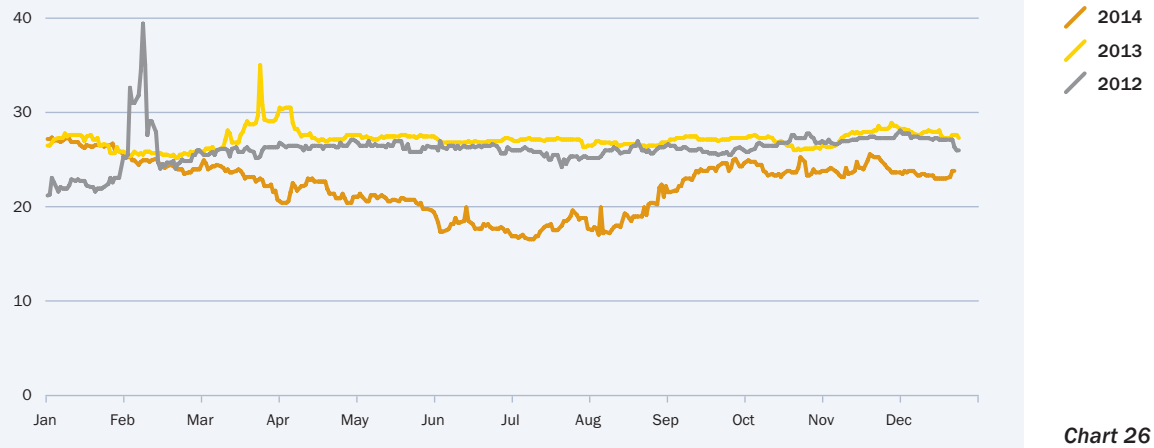


Chart 26
CEGHIX day-ahead market

Source: CEGH

weak demand caused the CEGHIX benchmark price to fall to EUR 16.50 – the lowest price since May 2010.

Spot prices rose in September, in line with the seasonal trend. Nevertheless, the mild weather and high levels of gas in storage continued to have an impact on the VTP. Events in Ukraine and related concerns over security of supply had little effect on CEGHIX prices for most of the year.

The number of members registered to trade on the CEGH VTP rose during 2014, reaching 180 by the end of the year. In comparison there were 162 registered members at the end of 2013.

Some 40.9bn cu m of natural gas was traded on CEGH in 2014, a year-on-year increase of 17% and the second-highest volume ever recorded after 2012, when almost 47bn cu m was traded. Buyer interest jumped sharply in the fourth quarter of 2014, with traders purchasing gas at CEGH and then transporting it in the direction of Ukraine. Some 12.7bn cu m was traded during the quarter.

Exchange-based trading at CEGH increased again in 2014, and totalled 1.98bn cu m, compared with only 1.23bn cu m in 2013. The within-day market accounted for the majority of the trading volume between October and December. This development

TRADING VOLUMES AT THE CEGH, bn cu m

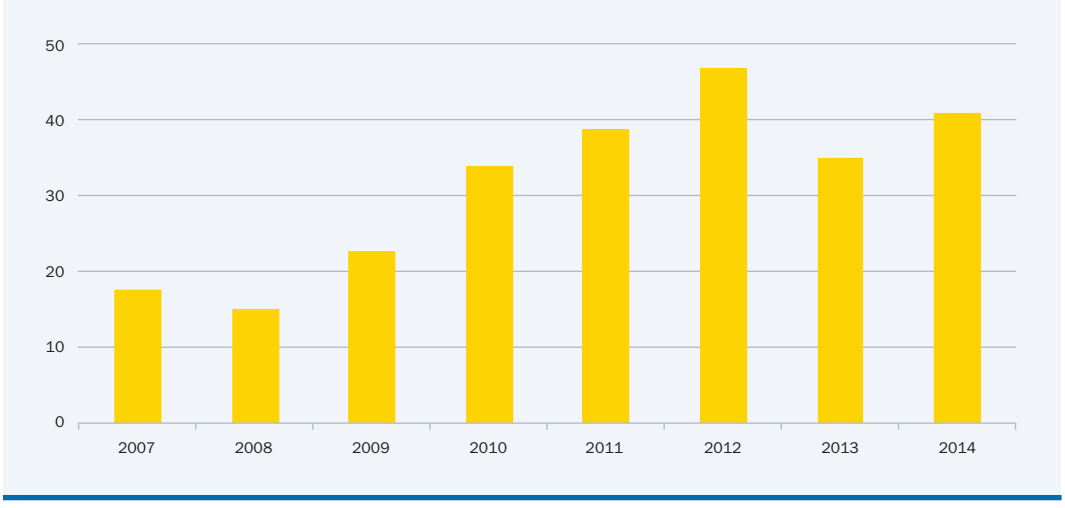


Chart 27
Trading volumes at the CEGH

Source: EEX

CEGH OTC TRADING VOLUMES, 2014 million cu m

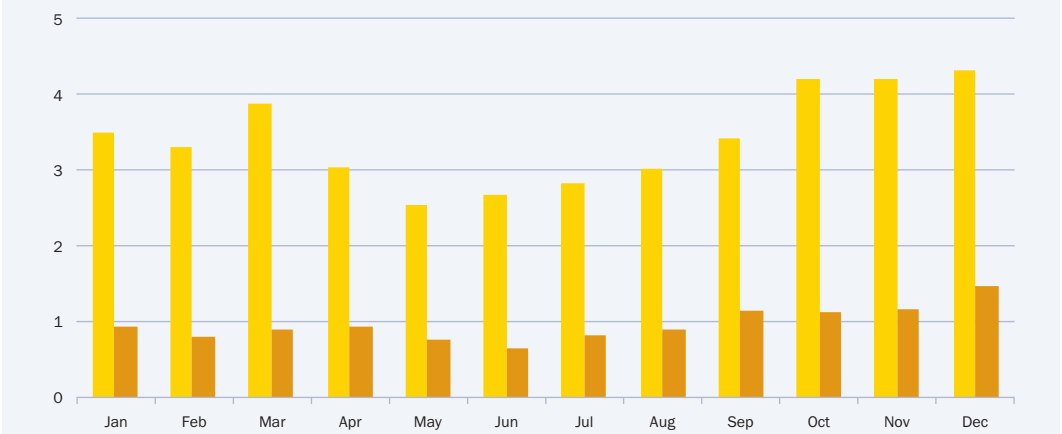


Chart 28
CEGH OTC trading volumes, 2014

Source: CEGH

CEGH EXCHANGE-TRADED VOLUMES, 2014, million cu m

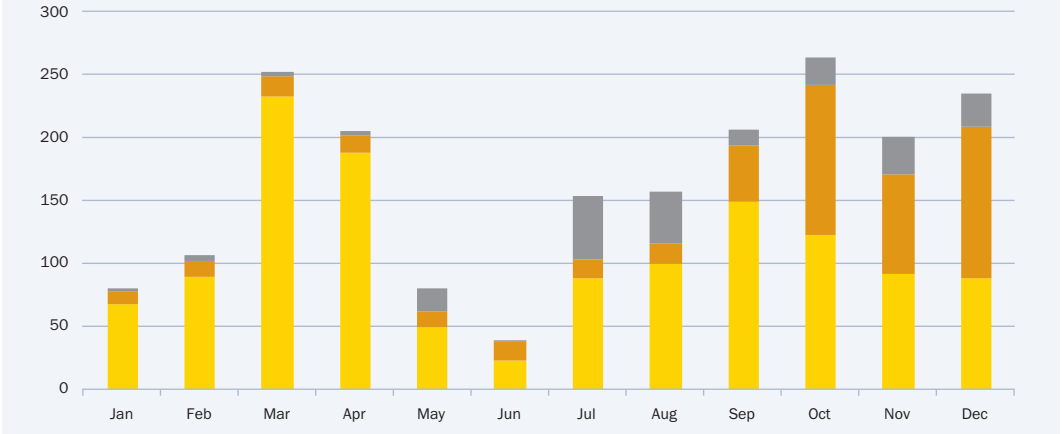


Chart 29
CEGH exchange-traded volumes, 2014

Source: CEGH

was mirrored in call-offs of balancing energy, which rose in the fourth quarter of 2014 owing to restrictions on gas deliveries to one of Austria's entry points. Exchange-traded futures accounted for 30% of trading at the exchange in July and August.

The bid-ask spread – the difference between bid or buy price and the selling price – at the CEGH narrowed further in 2014. A small spread suggests that adequate numbers of participants are active on the market. The churn rate shows how many times a cubic metre of gas is traded before it is physically transferred. The average in 2014 was unchanged year on year, at 3.6.

The price difference between the CEGH and other hubs is a good indicator of the degree of market integration. The NCG virtual trading point is the most important benchmark for prices in Germany. In 2013 the difference in prices at the CEGH and NCG fluctuated sharply. CEGH prices were substantially lower at the beginning of 2013 due to physical congestion in southern Germany and the resulting increase in wholesale prices. Prices at the CEGH were higher than the NCG benchmark for almost the whole of 2014, and the spread was substantial in October, peaking at EUR 4.40/MWh. This was due to increased buyer interest sparked by demand for reverse flows in the direction of Ukraine,

CEGH OTC DAY-AHEAD BID-ASK SPREAD, EUR/MWh

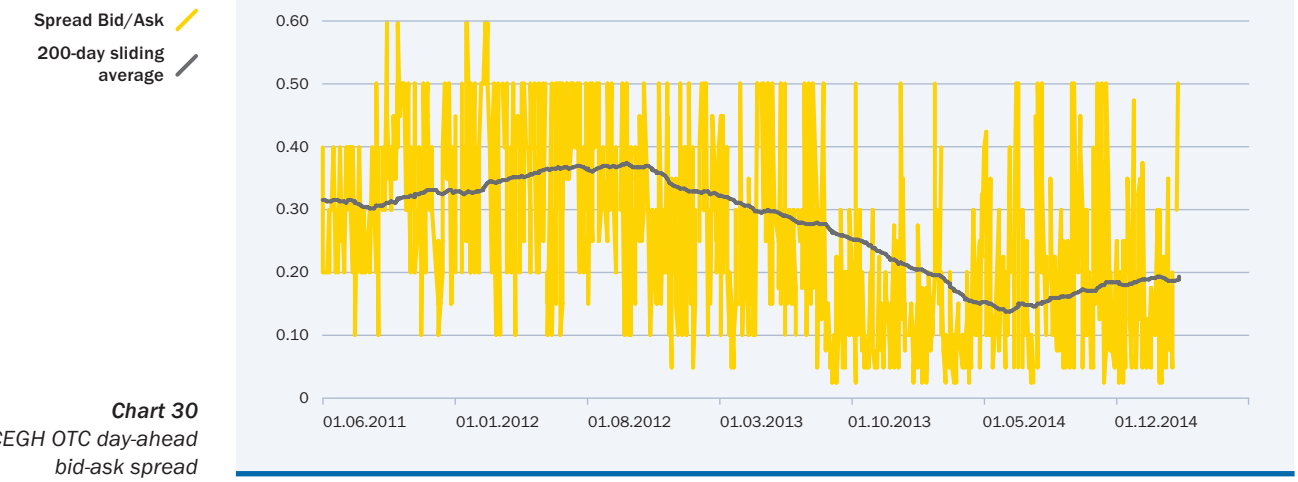


Chart 30
CEGH OTC day-ahead bid-ask spread

Source: CEGH

as well as to congestion in deliveries from Germany to Austria.

STORAGE MARKET AND STORAGE CAPACITY

Austria's gas storage facilities are all located in the eastern market area, in the concession areas of the two oil and gas producers, OMV Aktiengesellschaft (OMV AG) and Rohöl-Aufsuchungs Aktiengesellschaft (RAG AG). Capacity is marketed by five storage system operators. Customers must organise and pay for transportation from the Net Connect Germany (NCG) market area to the eastern market area when using storage capacity offered by Astora and GSA: supplies from the German gas grid are used to fill Haidach, and storage volumes for the Austrian market are imported from Germany.

Working gas volumes at storage facilities directly connected to the market area amount to almost 70% of Austria's annual consumption. The LAB storage complex in Slovakia, operated by Nafta and Pozagas, is also connected to the VTP via the MAB pipeline.

Due to the increase in the number of storage facilities in the past decade (e.g. 7Fields, Haidach and Aigelsbrunn) and the addition of 685m cu m of capacity by E.ON Gas Storage, the total working gas volume at Austrian

CEGH – PREMIUM OVER NCG, DAY-AHEAD, EUR/MWh

Chart 31
CEGH – premium over NCG, day-ahead

Source: ICIS Heren

STORAGE CAPACITY IN AUSTRIA

Storage system operators/storage facilities	Injection rate, MWh/h	Proportion of total injections	Withdrawal rate, MWh/h	Proportion of total withdrawals	Working gas capacity, MWh	Share of total working gas capacity
OMV Schönkirchen	7,306		10,790		20,614,000	
OMV Tallesbrunn	1,405		1,798		4,496,000	
OMV Thann	1,293		1,461		2,810,000	
Total OMV storage capacity	**10,004**	**28%**	**14,049**	**32%**	**27,920,000**	**30%**
RAG Puchkirchen	5,800		5,800		12,140,000	
RAG Haidach 5	224		224		180,000	
RAG Aigelsbrunn	560		560		1,460,000	
RAG Nussdorf/ Zagling	681		681		1,310,000	
Total RAG storage capacity	**7,265**	**21%**	**7,265**	**17%**	**15,090,000**	**16%**
E.ON Gas Storage 7fields	6,742	19%	10,112	23%	19,415,000	21%
Storage facilities connected to the market area	**24,011**		**31,426**		**62,425,000**	
Astoria Haidach	3,733	11%	4,133	9%	9,900,000	11%
Gazprom Haidach	7,467	21%	8,267	19%	19,800,000	21%
Total	**35,211**	**100%**	**43,826**	**100%**	**92,125,000**	**100%**

Table 7
SSOs and storage capacity in Austria, 1 April 2015

Source: Corporate websites: www.omv.com; www. rag-energy-storage.at; www.astora.de/speicher.html; www.eon-gas-storage.de; www.gsa-services.ru Storage products

storage facilities was 92,125 GWh as of 1 April 2014 – more than total consumption that year.

Austria's largest storage system operator is OMV Gas Storage GmbH, which accounts for 30% of total storage capacity, and 45% of capacity in the eastern market area.

The company offers a range of standard bundled products with specified ratios of working gas capacity (WGC) and withdrawal and/or injection rates, and various withdrawal cycle times.

OGS amended its standard bundle last year, reducing WGC and raising the withdrawal

cycle time from 83 days to 94. The other SSOs left their bundles unchanged, while EGS launched two new bundles when it entered the market.

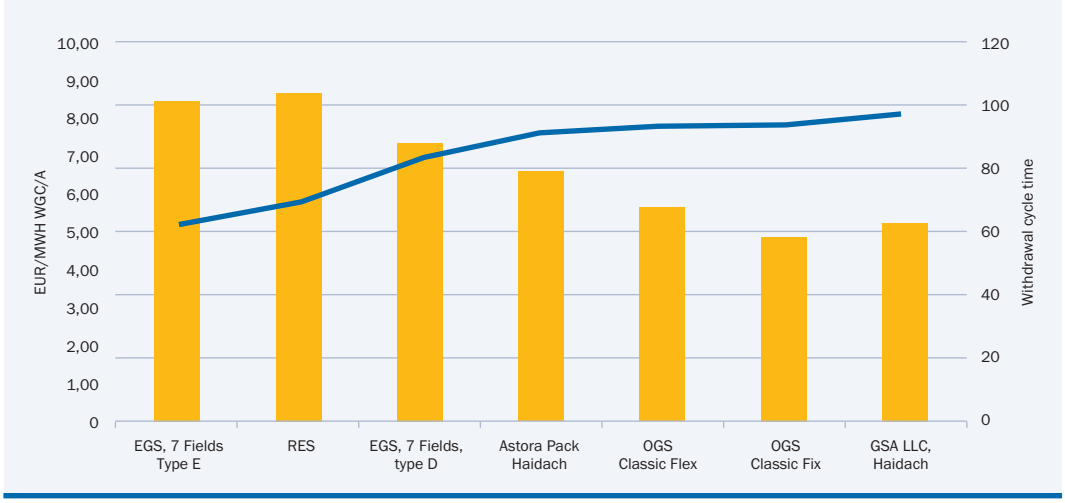
Unbundled products comprise separate offers for working gas capacity, and withdrawal and injection rates. Customers can create a suitable storage portfolio by combining standard bundles and unbundled products. Several SSOs offer unbundled services, but the prices are often determined on the basis of negotiations and therefore not published.

RES is the only SSO that does not publish fixed prices for unbundled services. In addition to these standard and unbundled products EGS, Astora, GSA and OGS also hold storage capacity auctions. OGS offers a bundle comprising 17 GWh of WGC and a withdrawal rate of 12 MW, with a lower withdrawal cycle time of 60 days. EGS markets a type E bundle with a duration of two to five years, and prices based on the summer-winter spread.

STORAGE PRICES IN AUSTRIA

The Austrian storage system operators publish their prices for standard products. The specifications for such products vary, and the absolute figures are therefore not fully comparable. Charts 32 and 33 show that storage charges vary depending on the number of days in the withdrawal cycle, i.e. the period in which the contractually agreed

ANNUAL STORAGE CHARGES, WGC, EUR/MWh



Source: Corporate websites and own calculations

Chart 32
Published storage charges based on working gas capacity for standard bundles in Austria, one-year contract, WGC/yEUR/MWh

ANNUAL STORAGE CHARGES, WITHDRAWAL RATE, EUR/MW

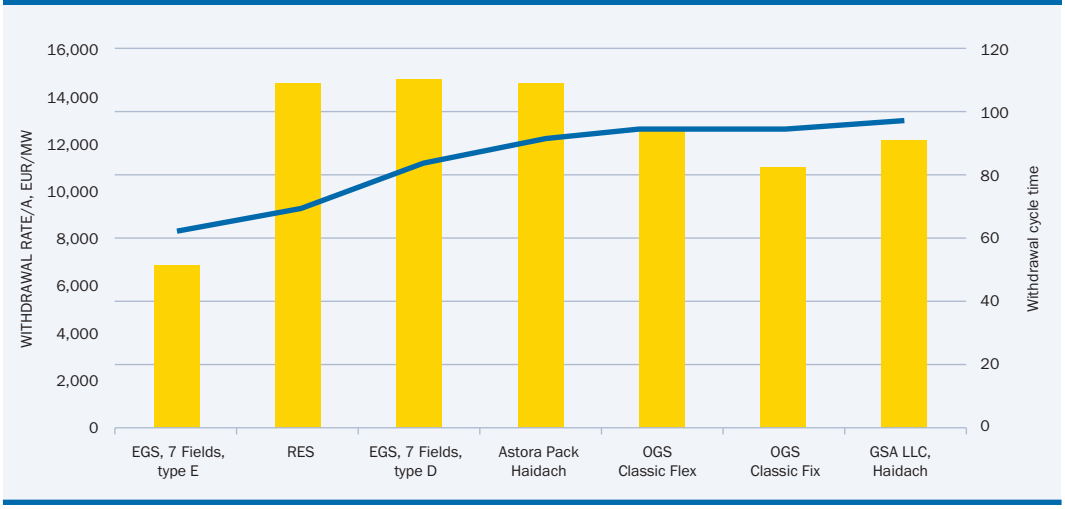


Chart 33
Published storage charges based on withdrawal rate per hour for standard bundles in Austria, one-year contract, withdrawal rate h/a, EUR/MW

Source: Corporate websites and own calculations

working gas volume can be withdrawn in full. OGS's standard bundle has the lowest storage charge, but a comparatively long withdrawal cycle time of 93 days.

The SSOs' published storage charges have fallen compared with 2010, with the exception of RES, which has raised its charges by around 4%.

Over the last few years, storage capacity has increasingly been allocated by auction in Austria, and in other EU countries including the Czech Republic, France, Germany and the United Kingdom, meaning that storage has a market value.[10] OGS, EGS, Astora and GSA have all held auctions in Austria to date, with the first three companies using the Store-X auction platform.[11] OGS auctions off annual contracts for a bundle with a withdrawal cycle time of 90 days, which is lower than the withdrawal cycle time for its standard bundle (100 days).

[10] For a discussion of the value of a GSE storage facility, see: GSE, the Value of Gas Storage, June 2014, and GSE, Challenges and Outlook for Gas Storage in Europe – GSE presentation at the Energy Community workshop, 28 May, Vienna, published at http://www.gie.eu/index.php/publications/gse; CEER, CEER vision on the regulatory arrangements for the gas storage market, April 2015; on current price determination mechanisms at auctions: ZbynĐk Pokorný, RWE Gas Storage, s.r.o., Appetite for storage capacity: Recent Prices and Contract Duration, European Gas Transport & Storage Summit, 23-24 March 2015, Munich, published at https://dpm11uzz3cg60.cloudfront.net/gtsevent.com/uploads/2015/03/26142526/Zbynek_Pokorny_2015.pdf

[11] A list of the registered storage system operators is available at http://www.store-x.net

According to OMV's 2014 annual report, OGS also cut its prices under existing storage contracts in July 2013.[12] This was a reaction to "prevailing market conditions", including further narrowing of the summer-winter spread.[13] In its annual report for 2013, OMV also assumes that gas storage prices will remain low, which in turn will reduce profitability.[14]

It should be noted that owing to the increased use of capacity auctions, published storage charges have lost significance when it comes to concluding contracts. As a result, the charges do not reflect the prices that can currently be charged on the Austrian storage market.[15] Presumably, the revenues generated at auctions are lower due to the significance of the summer-winter spread in price formation.

Competition on the retail market

At the beginning of 2014 only three suppliers reduced their energy prices for gas: Salzburg AG (9.7%), TIGAS (4.9%) and Gasdiskont (5.6%). This reticence among gas suppliers continued into the first three months of 2015. Although wholesale gas prices fell steadily in the first eight months of 2014, and only recovered slightly thereafter, TIGAS was the only regional supplier to cut its energy prices at the start of 2015. Energie Steiermark, Energie Graz and Stadtwerke Leoben announced a 10% price reduction effective from 1 April 2015. Energie AG offered its existing customers lower prices in the form of temporary discounts. The reluctance to cut prices was mainly attributable to political uncertainty on account of the crisis in Ukraine and the associated supply risk.

At the beginning of April 2015 the household energy price of the cheapest supplier in most regions (Montana) was 2.22 cents/kWh including new customer discounts, which was significantly lower than the cheapest offer a year earlier, of 2.56 cents/kWh (goldgas). During the same period, the weighted energy price in Austria fell only marginally, from 3.69 cents/kWh to 3.68 cents/kWh.

In the past year, industrial gas prices averaged between 2.27 cents/kWh and 3.06 cents/kWh, while the average household price ranged from 3.42 cents/kWh to 3.98 cents/

[12] OMV Annual Report 2014, p.49, published on the OMV website: www.omv.com
[13] OMV Annual Report 2013, pp.46 and 54
[14] OMV Annual Report 2013, p.66
[15] This means, for instance, that published storage charges are not adopted as the minimum price at auctions.

kWh. Energy prices for household consumers remained virtually unchanged during 2014, but those for industrial customers declined sharply (see Chart 34).

In 2015, the average grid utilisation charge was only 0.42% lower than in the previous year. Households in Carinthia were subject to the biggest rise, at 6.22%, while the largest cut came in Lower Austria, where charges fell by 3%.

In total, there are 33 gas suppliers and three independent brands in the market for household and small business consumers. Between January 2014 and April 2015 eww ag's Gastino brand, E-DI from schlaustrom, Max Energy and Leu (both private German energy supply utilities) all entered the market. Austria's largest alternative electricity supplier Verbund launched gas retail operations in November 2014.

Households in Vienna and Lower Austria currently have a choice of up to 36 gas products[16], compared with just over 20 in 2014 and 15 the year before that. The major regional suppliers normally offer one or two products, with the exception of Energie Allianz, which gives customers a choice of between four and eight products.

CONSUMER AND WHOLESALE ENERGY PRICES, (2007=100)

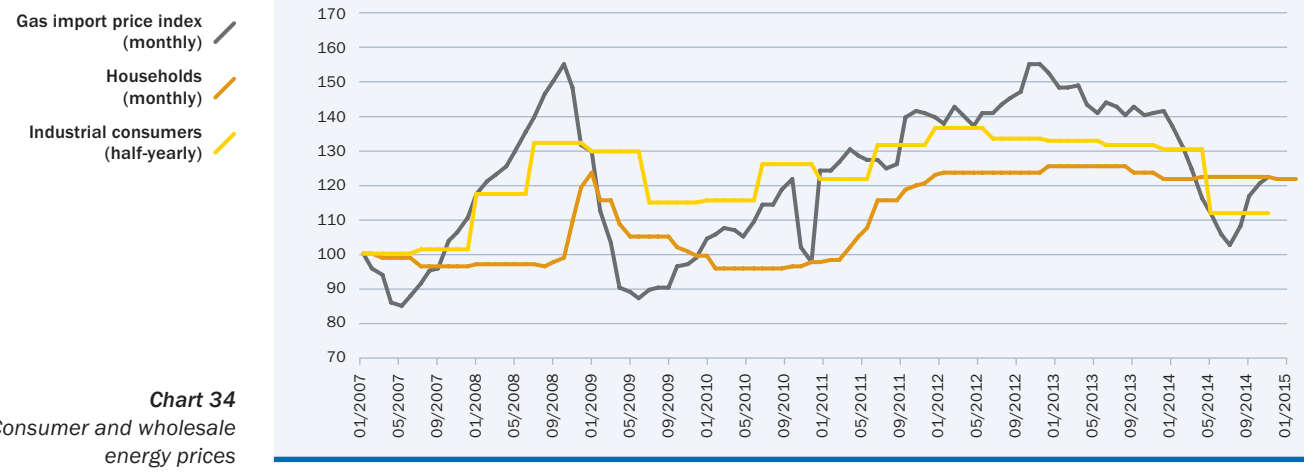


Chart 34
Consumer and wholesale energy prices

Source: E-Control tariff calculator and industrial price surveys, and Statistics Austria

[16] Tariff calculator, April 2015

In Vorarlberg, where choice is significantly lower, the number of products available has increased to 18, up from three in 2013 and eight in 2014. Businesses in Tyrol and Vorarlberg now receive up to 14 offers for gas supply, compared with up to 34 in the rest of the country.

Almost 70% of suppliers offer new customer discounts. For households, these discounts can amount to 30% of total energy costs, translating into savings of up to EUR 180 for a typical household. Most of the discounts are offered as part of a range of different promotions, and not only as flat-rate discounts but also in the form of free days of supply, e.g. 30 days or four months.

The potential saving as a result of switching from the regional incumbent's standard product to the cheapest alternative supplier has risen almost continuously over the last 18 months (see Chart 35) and hit a record high in April 2015. In Klagenfurt, the savings on offer recently reached EUR 374 per year including the new customer discount (Eur 130 without the discount).

For companies in Vienna with annual consumption of 100,000 kWh, switching

POTENTIAL SAVINGS IN GAS COSTS, EUR/y (households, 15,000 kWh/y)

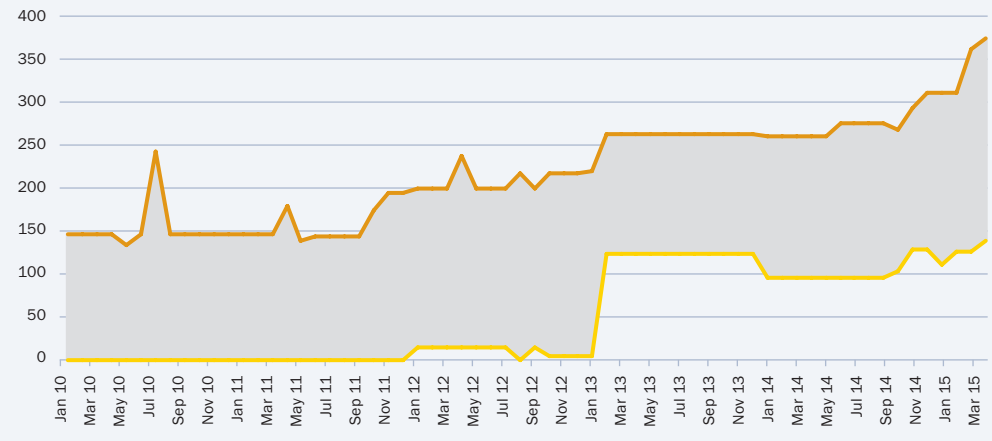


Chart 35
Potential savings on gas costs by switching from the regional to the cheapest supplier, monthly maximum and minimum of all federal provinces, over time

Source: E-Control tariff calculator

NATURAL GAS: SWITCHING RATE AND NUMBER OF METERING POINT TRANSFERS

Consumer category	2013		2014		Change 2014/13
	Switching	Switching rate	Switching	Switching rate	Switching rate
Households	31,051	2.4%	58,514	4.6%	88.4%
Other small consumers	2,370	3.4%	2,681	3.8%	13.1%
Load profile metered	428	5.6%	438	5.7%	2.3%
Total	**33,849**	**2.5%**	**61,633**	**4.6%**	**82.1%**

Table 8
Switching rate and number of metering point transfers

Source: E-Control

EUROPEAN HOUSEHOLD GAS PRICES, cents/kWh

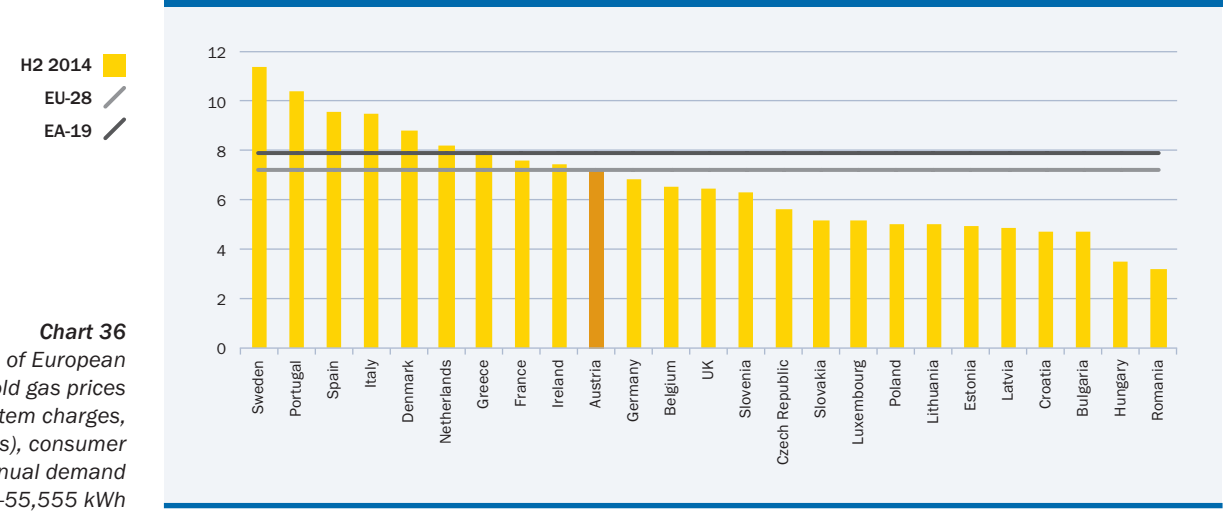


Chart 36
Comparison of European household gas prices (energy and system charges, taxes and levies), consumer band D2, annual demand of 5,555-55,555 kWh

Source: Eurostat, status as at 4 May 2015

from the regional supplier to the cheapest alternative provider can generate annual savings of up to EUR 1,600. A company with consumption of 400,000 kWh can save up to EUR 6,400 a year (including new customer discount).

2014 was a record year for switching, with a rate of 4.6% (see Table 9). This was mainly due to the number of household consumers who changed supplier. The switching rate among large enterprises only rose slightly in 2014. This is because industrial gas and electricity consumers do not necessarily need to switch provider in order to secure cheaper energy prices.

On the whole, it can be concluded that in spite of – or perhaps because of – the meagre price changes implemented by regional suppliers, competition has increased significantly, with new suppliers entering the market, various discount offers and above all thanks to the VKI Energiekosten-Stop[17] campaign. This is reflected primarily in increased switching rates.

Austria ranked tenth in the EU in terms of overall household prices in the second half of 2014 – the price of 7.30 cents/kWh was 0.11 cents/kWh above the EU-28 average and 0.59 cents/kWh below the EU-19 mean. This represents a reduction of about 3.2% in total prices compared to the same period a year earlier. In the second half of 2014, Austrian gas prices were higher than those in Germany (11th place) and the Czech Republic (15th place), but lower than those in Denmark, the Netherlands and France (see Chart 36).

[17] The Energiekosten-Stop campaign is described in the chapter on the electricity industry.

DEVELOPMENTS AFFECTING THE ELECTRICITY AND GAS MARKETS

Consumer services

ENERGY COMPANIES' CUSTOMER SERVICE AND ADVICE CENTRES

Since 1 January 2015 gas and electricity suppliers with more than 50 employees and total assets or revenue of over EUR 10m have been obliged to set up a customer service and advice centre to handle enquiries related to energy costs, switching, energy efficiency, energy poverty and power labelling. The relevant statutory obligations are outlined in section 82(7) Electricity Act 2010, section 127(7) Natural Gas Act 2011 and section 10(5) *Energieeffizienzgesetz* (Energy Efficiency Act). However, the legislation does not provide a definition of energy poverty or specify who is entitled to make use of these advisory services.

In the course of its work on the issue of energy poverty, in autumn 2014 E-Control began to gather information on the plans to implement these regulations and the initial steps taken by the gas and electricity suppliers affected. The largest providers of gas and electricity to end users were requested to submit a written position statement on their plans for a customer service and advice centre. Most companies are of the opinion that they have been operating such a centre for some time.

ANALYSIS OF WEBSITES

An analysis of the companies' websites showed that they provide detailed information on energy efficiency, ranging from simple household energy-saving tips to advice on own generation, for which the companies offer a range of different consulting services. However, there is hardly any information on energy poverty. Salzburg AG and Energie Steiermark Kunden GmbH are the only suppliers that explicitly refer to energy poverty; at Salzburg AG this issue is handled by the ombudsman, and in the case of Energie Steiermark by the customer service and advice centre. None of the other energy suppliers use the term, nor do they provide any information on the steps open to consumers if they default on their bills.

In this context, the information on basic supply (section 77 Electricity Act 2010 and section 124 Natural Gas Act 2011) posted on the corporate websites should also be mentioned. The majority of suppliers only provide the minimum legally required information on basic supply, often in the form a word-for-word citation of the legislation.

DOUBTS OVER INCREASE IN RANGE OF ADVISORY SERVICES

In sum, the initial assessment of the establishment of the required customer service and advice centres by the major energy suppliers showed that these companies currently provide extensive information and advice on energy efficiency, and as further

progress is made on implementing the Energy Efficiency Act, the amount of information can be expected to increase. However, as far as switching and energy poverty are concerned, there are significant gaps in the information provided. In some cases, there is justifiable doubt as to whether the energy companies' advisory services have improved at all since 1 January 2015 or that the amount of information currently on offer is adequate.

SERVICE CENTRES HARD TO REACH

In other cases, the companies have set up service centres that deal with the various topics mentioned above, but information on the centres is nowhere to be found on the companies' websites. This means that it is difficult for customers to find out whether they can obtain support from their supplier, for instance if they are having problems paying their bills. In the interests of transparency and consumer friendliness, E-Control will urge the companies that are obliged to set up a service and advice centre to provide additional support on the aforementioned topics and to publicise the services available. Further investigation of the progress made on implementing this legislation is planned.

THE E-CONTROL ENERGY HOTLINE

E-Control is the leading source of information for gas and electricity customers. The E-Control energy hotline can be reached by dialling 0810 102554 (Austria only; calls cost EUR 0.044/minute). It is often the first port of call for energy-related queries, most of which can either be answered directly or passed on to one of our in-house experts or the dispute settlement service.

The hotline can be reached from 8.30-17.30 from Monday to Thursday, and from 8.30-15.30 on Fridays. Consumers who call outside these times can leave their telephone number and one of our staff returns their call on the following working day.

In 2014 the hotline handled 7,000 calls, around 7% fewer than in the previous year. Many of the queries received in the first half of the year related to the VKI Energiekosten-Stop initiative, but the second half was comparatively quiet in spite of a number of developments that affected gas and electricity consumers.

The majority of written queries can also be dealt with by our energy hotline staff. Around 1,650 such enquiries were received via our online form and by e-mail, post or fax in 2014. In the past few years there has been a discernible shift towards written communication, and 2014 was no exception, with a 17% increase in written enquiries compared with a year earlier.

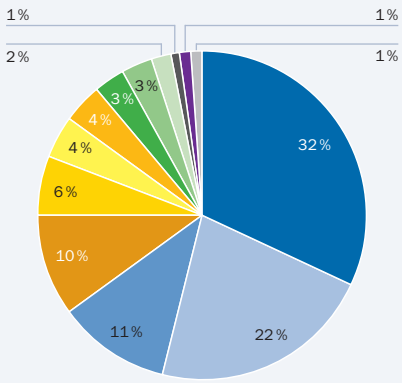
MAJORITY OF QUERIES RELATED TO SUPPLIER TRANSFERS

The largest number of enquiries are in connection with switching supplier (32%),

Supplier transfers
Tariff calculator
Billing
Other queries/complaints
New connections, cancellations and removals
System charges
Energy price
Renewable electricity, photovoltaics
Meters
Network connections
Payment difficulties
Service quality
Taxes/levies

Chart 37
Reasons for contacting the energy hotline

REASONS FOR CONTACTING THE ENERGY HOTLINE



Source: E-Control

followed by the tariff calculator (22%) and billing (11%). The questions regarding supplier transfers mainly deal with general information about procedures, deadlines and company details.

Many of the calls and written queries regarding the tariff calculator are concerned with the use of the tool, or include a request to carry out a comparison for the purpose of changing supplier. The energy hotline also provides information to consumers who do not have an internet connection.

General questions about billing and invoice checks are a particularly common subject of written queries. Many consumers make use of the opportunity to have their bills checked by E-Control staff and receive information on proper invoicing and calculation of consumption. In this regard, the hotline often clarifies questions about the calculation of instalments and separate invoicing.

The remaining 35% of telephone and written enquiries deal with topics such as new connections, system charges, energy prices, meters and renewable electricity. Questions to the energy hotline on grid connections, payment difficulties, suppliers' and system operators' service quality and taxes and levies are less common.

LOCAL ADVICE EVENTS

Since 2012 E-Control has been working with local authorities to provide free advice to citizens in Austria's federal provinces. In spring and autumn 2014 we held a total of around 80 such advice events in Lower Austria, Upper Austria, Burgenland, Styria, Carinthia and Salzburg. The local authorities are responsible for advertising and organising the events, and use tried-and-tested channels such as local newspapers and mailshots to all households.

Residents can put their questions directly to E-Control experts in face-to-face consultations. Participating in these events gives our employees the opportunity to find out first-hand what issues and questions are the biggest concerns for energy consumers.

The topics that frequently come up at the events include using the tariff calculator, switching supplier, checking bills and own electricity generation (in particular using PV arrays). In many cases, the local authorities themselves take advantage of E-Control's services in order to find out more about optimising their costs on the gas and electricity markets.

ADVISING CONSUMERS FROM MIGRANT BACKGROUNDS

In autumn 2014 E-Control launched a customer advice initiative aimed at citizens from migrant backgrounds. This takes the form of brief presentations on E-Control's activities and services, followed by information and tips on saving energy at home. Participants also have the opportunity to get some one-on-one advice. Consecutive interpretation into the consumers' native language is also available for some of these presentations and consultations. E-Control employees have visited 16 associations and cultural centres since September 2014.

DISPUTE SETTLEMENT

In accordance with section 6 E-Control Act, and in addition to the Regulation Commission's responsibility for arbitration in disputes between system operators and users (under which official decisions are handed down), E-Control has established a dispute settlement service. All electricity and gas customers, suppliers, system operators, other electricity and gas enterprises and interest groups can submit complaints or disputes to E-Control for arbitration, in particular those concerning gas and electricity bills. E-Control is required to seek a mutually acceptable solution within six weeks.

Electricity and gas companies are legally obliged to cooperate with arbitration proceedings. After obtaining position statements, E-Control issues a non-binding recommendation for resolution of the dispute to the companies. In addition to its arbitration activities, pursuant to section 22(6) E-Control Act the dispute settlement service is also an important source of information for consumers, providing them with details of their rights and the opportunities presented by the liberalised electricity and gas markets. In 2014, gas and electricity consumers submitted a total of 3,178 queries and complaints to the dispute settlement service – a slight increase on 2013. The subject

of enquiries and complaints ranges from switching supplier and general questions about billing and increased consumption, to problems resulting from price rises and enquiries about payment difficulties and impending disconnection.

THE E-CONTROL WEBSITE

The number of visits to the E-Control website remained roughly unchanged in 2014, at around 1.1m.

E-Control's online applications contributed in various ways to the noticeable rise in activity among Austrian gas and electricity consumers. The main source of impetus was again our website with its target-group-based design, and the consistently low average bounce rates of around 10% are an indication that the site meets the needs of consumers looking for information.

ONLINE TOOLS

The tariff calculator remains our most important online application, and a particularly large number of consumers used the tool to compare prices in spring and autumn 2014.

During the year more than half a million consumers used the tariff calculator to identify the cheapest gas and electricity prices. The technology behind the application also showed its worth in our collaboration with the VKI for the Energiekosten-Stop collective switching campaign.

A new price comparison tool, the SME tariff calculator, went online at the start of 2014. The number of calls to the E-Control hotline and queries submitted via our online contact form on this topic prior to the launch was an indication of the strong demand for such an application. Thanks to the tool, companies with electricity consumption of up to 100,000 kWh and gas consumption of up to 400,000 kWh can now compare all electricity and gas tariffs.

Well over 20,000 businesses made use of the tool in its first year of operation.

The SME energy price check introduced at the start of 2013 allows businesses to compare individually negotiated energy prices with those paid by other companies in the same sector. The application attracted over 10,000 visitors in 2014, meaning that in total more than 30,000 SMEs made use of our transparent, user-friendly price comparison tools. Considering the size of the target group, which is far smaller than the household segment, the reach of the new tools is very encouraging.

Consumer protection

As part of the implementation of the EU's third energy package, a series of measures were introduced by means of the Electricity Act 2010 and the Natural Gas Act 2011 to guarantee basic supply and to outline appropriate steps for protecting vulnerable consumers.

A regulated reminder procedure for outstanding payments is also specified – consumers must receive two reminders, each providing a grace period of two weeks, with the final reminder prior to disconnection sent by registered mail. Disconnections are not permitted before public holidays and weekends. In addition, the system operators' fees for reminders and disconnections were set by ordinance. Pursuant to section 77 Electricity Act 2010 and section 124 Natural Gas Act 2011, customers who default on their bills have the option of concluding a basic supply agreement in order to ensure continued energy supply. However, disconnection is allowed if a customer defaults again. There is no general right to have a prepayment meter installed. Recipients of basic supply who default can have such a meter installed in order to avert the threat of disconnection. Prepayment meters can also be installed if a deposit is payable, irrespective of whether the consumer is receiving basic supply.

In order to assess the effectiveness of these measures, section 88 Electricity Act 2010 and section 131 Natural Gas Act 2011 require system operators and suppliers to provide data for the purposes of market monitoring.

GAS AND ELECTRICITY MONITORING DATA

Although the federal provinces are responsible for electricity-sector monitoring, the data must be forwarded to the regulator. The data collected show that around 6,000 prepayment meters were installed in 2014, and almost 40,000 customers were disconnected after falling behind with their payments. However, the figures show that fewer than 100 customers nationwide received basic supply. This raises the question as to whether basic supply is effective in its current form or is perceived as such, since it is supposed to help consumers avoid disconnection. Prepayment meters are also intended for situations where customers are threatened with disconnection.

The situation is similar in the gas industry, for which E-Control has direct responsibility and the power to enact ordinances. As with the electricity industry, the number of recipients of basic supply is very low (also under 100), but 7,000 consumers were disconnected in 2014. It is striking that far fewer gas customers were disconnected than electricity consumers. This is not solely due to the small number of gas customers, since around one-third of all energy consumers are supplied

with gas. This means that disconnections are more frequent in the electricity sector.

EXEMPTION FROM RENEWABLE ENERGY SUPPORT COSTS

In addition to the aforementioned measures included in the Electricity Act 2010 and the Natural Gas Act 2011, the Green Electricity Act 2012 includes provisions to relieve the financial burden on consumers who meet certain criteria (for instance, if they receive social security benefits such as unemployment benefit or income support and are on low incomes). Eligible consumers can apply for an exemption from the flat-rate renewables charge (EUR 30 per year for households) and a renewables contribution in excess of EUR 20. As of 31 December 2014, around 116,000 people in Austria were exempt from these renewable electricity charges, a year-on-year increase of 8% (31 Dec 2013: 107,000).

International developments

EU ENERGY INFRASTRUCTURE PACKAGE

The implementation of certain projects is vital if Europe is to meet its energy and climate change targets, complete the internal energy market and enhance energy supply security. In the European Commission's view, there is a danger that some infrastructure projects will not be implemented on time or at all due to problems related to approval procedures, regulatory systems and/or financing. Regulation (EU) No 347/2013 on guidelines for trans-European energy infrastructure (the Infrastructure Regulation) was enacted to promote the completion of projects required for the timely development and interoperability of trans-European energy infrastructure[18] priority corridors and areas.

The Regulation came into effect on 1 June 2013, replacing the trans-European energy networks (TEN-E) guidelines. The Infrastructure Regulation also states that certain EU-wide infrastructure projects will be designated as projects of common interest (PCIs). Such projects will benefit from simplified approval procedures and preferential regulatory treatment and can apply for financial support from the EU. The projects are split into four energy infrastructure categories: electricity, gas, oil and carbon dioxide (CO_2).

Projects must meet several criteria before they are included in the list of PCIs. They must be required for one of the priority

corridors or priority thematic areas specified in Annex 1 to the Regulation, concern at least two member states (or one member state and an EEA country), and the potential overall benefits should outweigh the costs. In addition, electricity and gas infrastructure projects must make a significant contribution to market integration, competition (gas infrastructure projects only), sustainability or security of supply.

Following a pilot selection procedure in 2012 and 2013, the European Commission presented a list of 248 energy infrastructure priority projects in October 2013. The list was adopted by way of Commission Delegated Regulation (EU) No 1391/2013 commenced on 10 January 2014. The projects include 14 electricity and four gas initiatives either in Austria or with Austrian involvement.

The PCI list is due to be revised every two years, meaning that projects must be resubmitted, and priority projects may lose their PCI status. Preparations for the second PCI list, which is scheduled for adoption in 2015, began in 2014 in consultation with the various national regulators. The list will again be enacted in the form of a Commission delegated regulation commencing in early 2016. With regard to projects from the initial Union list that had reached sufficient maturity, the project promoters were able to submit an investment application, including an application for cross-border cost allocation, to the relevant regulator by 31 October 2013. The regulators then had six months to issue coordinated decisions on the allocation of investment costs and whether these should be included in the grid utilisation charges. Several investment applications were submitted across the EU. E-Control participated in one cost allocation procedure and the resulting official decision was posted on its website.

Under the Infrastructure Regulation, ENTSO-E and ENTSOG are obliged to publish a methodology for a harmonised, energy-system-wide cost-benefit analysis. This forms the basis for the selection of PCIs, any cost allocation procedures and the selection of projects eligible for EU support. After receiving opinions from ACER, the European Commission and, where applicable, the member states, the methodologies were to be submitted to the Commission for approval. The approved methodologies were published on the ENTSO-E and ENTSOG websites in February 2015.

The national regulatory bodies collaborating through ACER were required to define and publish a series of indicators and corresponding reference values for the comparison of unit investment costs for comparable gas and electricity projects by 16 May 2015. These indicators and reference

values were published on the ACER website.
The Infrastructure Regulation obliges ACER to facilitate the sharing of alternative courses of action and recommendations regarding a common methodology to evaluate the higher risks incurred in investments in electricity and gas infrastructure projects. In this respect, ACER issued Recommendation No 03/2014 on incentives for PCIs and on a common methodology for risk evaluation. Under the Infrastructure Regulation, each national regulator was required to publish its methodology and the criteria used to evaluate investments in electricity and gas infrastructure projects and the higher risks incurred by them by 31 March 2014. E-Control published its methodology and criteria on time on its website.

In November 2014 the Commission made public an initial list of PCIs that were eligible for funding under the Connecting Europe Facility, which included one Austrian project.
From 2015 ACER will submit a consolidated annual report on the gas and electricity PCIs to the Regional Groups set up for the purpose of selecting projects. The report will evaluate the progress made and make recommendations for overcoming any delays or difficulties encountered. ACER published the first report on its website in July 2015.

Monitoring wholesale energy trading

ORDINANCE ON ENERGY WHOLESALE DATA COLLECTION

In 2014 E-Control launched a consultation process on early implementation of the extended collection of transaction data for the purpose of monitoring trading in wholesale energy products, as well as assessing compliance with the obligations and prohibitions imposed by Regulation (EU) No 1227/2011. Based on these consultations, the Ordinance on Energy Wholesale Data Collection was enacted in January 2015 and published in the Federal Law Gazette.

The Ordinance requires marketplaces to submit information on the buy and sell orders they receive, and on transactions concluded to E-Control from 1 May 2015. Market participants are not required to take any action, because reporting is not carried out in their name, but is an obligation for the various marketplaces.

Market participants must provide notification of non-standard contracts (e.g. exclusive supply contracts or agreements that include

individually negotiated provisions) from 1 October 2015 onwards. The Ordinance provides for an exemption for small generators, as well as a significant additional limitation on reporting obligations, under which retailers with sales of up to 150 GWh are exempt. Such suppliers are only required to notify ACER of any non-standard contracts from April 2016, but there is no obligation to submit information regularly to E-Control. However, the registration requirements are not affected by the exemption, as this is essential for reporting to the EU.

Pursuant to the Ordinance on Energy Wholesale Data Collection, the transmission of transaction data to ACER constitutes fulfilment of the obligation to report to E-Control. This means that details of a transaction forwarded to ACER (either directly or via a third party) need not be submitted to E-Control. As a result, it is anticipated that with effect from April 2016, market participants will no longer be required to report transactions to E-Control, provided they have successfully reported to ACER.

REMIT PROJECT

Several key milestones have been met in the implementation of REMIT in Austria. Staff moved into the REMIT offices, where operational monitoring of trading activities will take place, in May 2014. The physical separation of such monitoring is vital to minimising risk and guaranteeing the confidentiality, integrity and protection of the data collected under REMIT.

The national registration system (NRS) for market participants, provided for under REMIT, came into effect in June 2014, enabling participants to fulfil their obligation to register pursuant to Article 9 of the Regulation. E-Control reviews the information submitted by the market participants before forwarding it to ACER. Once their registration has been completed, all market participants receive an ACER code, a unique identifier used for REMIT-related purposes.

Additionally, the software used to monitor trading and carry out quantitative analyses of the submitted wholesale energy data was upgraded and adapted to E-Control's requirements.

A draft cooperation agreement with regulators in neighbouring countries, which describes in detail the processes that form the basis of collaboration, was prepared in order to support regional cooperation between national regulators in accordance with Article 7(2) and Article 16(1) REMIT. The aim is to sign the agreement in the course of 2015.

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