

**ANNUAL REPORT 2013** 

# PICKING UP MOMENTUM – A CHANGING ENERGY MARKET

WORKING FOR YOU – WHEREVER YOU NEED ENERGY

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# MOMENTUM TOWARDS

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# REGULATION THAT ALLOWS FREE PLAY OF MARKET FORCES

# Sounds complicated but makes life simpler: amended energy legislation

An amendment to the *Elektrizitätswirtschaftsund* -organisationsgesetz (Electricity Act), passed by the lower house of the Austrian Parliament in July 2013, made power labelling compulsory. Electricity retailers must now label all the power they deliver to private consumers, and this requirement will be extended to supplies to small and medium enterprises and industrial consumers with effect from 1 January 2015. From then every kilowatt hour of electricity will require a guarantee of origin, and electricity generated at pumped storage power stations will also be included in the power labelling system.

The amendments to the Electricity Act 2010, the Gaswirtschaftsgesetz (Natural

Gas Act) 2011 and the *E-Control-Gesetz* (E-Control Act) were also used to transpose provisions of the EU Regulation on Wholesale Energy Market Integrity and Transparency (REMIT) into national law.

For example, the regulation requires member states to determine the penalties for breaches of REMIT. These must be proportionate, effective and dissuasive, and in line with the penalties adopted in implementing the EU Market Abuse Directive. The amended acts also confer on E-Control the powers needed to perform its monitoring and oversight functions under REMIT.

### Improvements all round – new market model in the eastern market area

The Natural Gas Act 2011 brought major changes in transmission network access. The previous system of capacity reservations based on contractually agreed transport routes was replaced by an entry-exit model, under which capacity is separately booked and traded at entry and exit points. Traders and suppliers reserving capacity at entry points are entitled to inject gas into the transmission grid of a market area and transport it to the virtual trading point (VTP). Capacity reservations at exit points entitle the holders to convey gas from the VTP to an exit point and withdraw it from the transmission grid. 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.

The Gas-Marktmodell-Verordnung (Gas Market Model Ordinance) 2012 launched a new market structure in Austria with effect from 1 January 2013. The changeover was largely trouble free, and all the system requirements were met on time thanks to market participants' outstanding efforts. The new model was well received by market players. Trading at the VTP declined in December 2012, ahead of the market transformation, but recovered afterwards. Volume has now reached new highs. The introduction of daily balancing, which makes it easier to supply consumers, has also been a success.

### CHANGES IN 2013 -A SUCCESS OVERALL

Although experience of the new model has been positive to date it has also revealed a need for some fine tuning. The main focus of the first amendments to the Gas Market Model Ordinance 2012, enacted in April 2013, was on clarifying the capacity nomination and renomination rules. In addition, the clearing and settlement agent's balancing rules were laid down in greater detail, and minor modifications were made to reflect network capacity and the market. A second round of amendments to the ordinance, passed in October 2013, introduced new arrangements for market participants' obligations to share information as well as for balancing energy pricing and the balancing rules for the Tyrol and Vorarlberg market areas. And a third set of amendments, adopted in December 2013, reduced the period for determination of system user contributions by clearing and settlement agents from six to three months

# All change on the western front – improved gas market access thanks to the Tyrol and Vorarlberg market models

The new gas market model, giving Tyrol and Vorarlberg direct access to the German market, has been in place since the start of October 2013. Since then consumers in both provinces have had a choice of additional suppliers. The new market structure is expected to result in stiffer competition and falling prices.

### **OVERCOMING ARTIFICIAL CONGESTION**

The background to the opening of the Tyrol and Vorarlberg markets to German suppliers

was a change in network capacities. Until then, for example, there had been artificial congestion at Lindau, on the border between Germany and Vorarlberg. The new system has eliminated this congestion, and the pipeline is open to new suppliers.

Integration with the NetConnect Germany (NCG) market area has opened up new perspectives for the Tyrol and Vorarlberg gas markets.

### Five-year horizon: new approach to tariff setting

### THIRD INCENTIVE REGULATION PERIOD EXTENDS STABILITY FOR ELECTRICITY DISTRIBUTORS

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 regulation period is now five years instead of four, and all the audited system operators (those that transported supplies over 50 GWh in 2008, as well as smaller Upper Austrian DSOs) are set individual productivity targets derived from an efficiency benchmarking study. The regulated companies have five years to close half of the efficiency gap identified by the study. Capital expenditure and any increase in the scale of operations are reflected in an investment and operating cost factor that is updated on a rolling basis. As with the gas distribution networks, the long-term return on



### NET INVESTMENT IN ELECTRICITY NETWORK DEVELOPMENT 2001-2012, EUR '000

**Figure 1** Net investment in electricity network development, 2001–2012

Transmission system operators Distribution system operators

Trend curve

Source: E-Control

capital employed has been set at 6.42% (4.72% for debt and 8.96% for equity). The model also features a general efficiency target of 1.25% per year and recognition of cost increases in accordance with an inflation estimate. A major advance is the treatment of inherent time lags, which compensates firms for the disadvantages caused by systemic delays in costs compensation. Another first is the use of a regulatory account, which eliminates the regulated companies' exposure to volume risk.

### LONG VIEW – A FAR SIGHT BETTER

The new model brings a number of benefits for regulated firms:

> Greater investment and planning certainty

because the parameters are set for five years;

- Lighter administrative workload as ongoing cost reviews are much less time consuming than detailed annual audits;
- > A chance to make higher profits: firms retain any additional savings, beyond those generated by staying on course for the productivity target, throughout the regulatory period (and afterwards consumers profit from the lower cost level).

The fact that the system creates adequate investment incentives is reflected in system operators' capital expenditure. Investment has grown steadily over the past few years (see Figure 1).

### More Europe – why new legal framework spells a big advance

### ONE FOR ALL -

### **ENERGY INFRASTRUCTURE REGULATION**

The EU regulation on guidelines for trans-European energy infrastructure came into force on 1 June 2013. The regulation centres on the selection of infrastructure projects of common interest (PCIs), which are eligible for a variety of forms of preferential treatment including fast-track approval procedures, co-financing from the EU budget and crossborder cost allocation. The regulation provides for the establishment of a "one-stop shop", i.e. a single national authority, for all permit granting processes. The pre-application procedure may not take longer than two years, and the permit granting procedure not more than 18 months.

### Harnessing solidarity

In principle, the cost of such schemes must be borne by the system operators concerned in the member states where the projects will have a net positive impact, unless the cost is covered by congestion rents or other charges. Where there is a net negative impact in a member state (the costs exceed the benefits) other system operators concerned may be required to make compensation payments, on application and subject to an agreement to this effect between the relevant regulatory authorities.

In addition, PCIs have access to funding from the Connecting Europe Facility, which has been allocated EUR 5.1 billion (bn) under the EU's multiannual financial framework (2014–2020).

### WRITING THE RULES TOGETHER – TO MAKE SURE EVERYONE WINS

One of the innovations brought by the third energy package is the development of common market rules for the European transmission grids (network codes). In this process, the third package regulations entrust the system operators themselves, represented by ENTSO-E and ENTSOG, with the development of these network codes. The package created an agency tasked by the European Commission with drawing up framework guidelines that lay the groundwork for the codes prepared by the system operators' associations. The codes are then enacted by the Commission, using the committee procedure; in future they will be delegated acts.

Framework guidelines are not legal acts and are thus non-binding. They can be seen as assembly instructions for the network codes, as well as being a quality yardstick. Only when the agency is satisfied that a network code conforms to the relevant framework guideline will it forward the code to the Commission and recommend its acceptance as a legal act.

The first such code – the network code on gas capacity allocation mechanisms – was published in the Official Journal of the EU in October 2013. This will serve as a model, at least in formal and structural terms, for future network codes to be used by the gas and electricity sectors.

#### **Close liaison**

Experience with the network code drafting process has shown the need for close liaison

between ENTSOG/ENTSO-E, the Agency for the Cooperation of Energy Regulators (ACER) and the European Commission at all times because of the large number of affected parties and the intricacy of the issues to be addressed. Implementing the network codes once they have been adopted as EU regulations also promises to be a challenging task. The regulators will have some hard work to do before the codes fall into place as complete and consistent sets of rules. Initial experience with applying the codes is likely to lead to amendments.

E-Control's collaboration with ACER (partly in a leading role) includes formulating and evaluating framework guidelines and network codes. Some aspects of the existing Austrian market rules, general terms and conditions, secondary legislation and possibly some Acts of Parliament will need to be adapted to prevent conflicts with the network codes. The latter take precedence over national law because of their status as Commission regulations.

### KNOWING WHERE WE ARE – NEW TRANSPARENCY REGULATION

A binding EU electricity transparency regulation came into force in June 2013. The

regulation is aimed at establishing, as far as possible, standard European practices with regard to the publication of information on loads, transmission network infrastructure, generation, cross-border exchanges of electricity, transmission network use and balancing markets.

To achieve this objective, ENTSO-E is charged with providing a central information transparency platform for all European market areas. The time allowed for this is 18 months, meaning that implementation must commence by the end of 2014. ENTSO-E has launched an IT project using an outside contractor. The data are mainly to be provided by national transmission system operators (TSOs), but may also be transmitted by other authorised organisations. ENTSO-E has developed a manual of procedures, consulted stakeholders on it and submitted the draft to ACER for its opinion. Implementation is to be fleshed out in detail and pushed forward next year, using the manual as a basis. Greater transparency can benefit consumers by enhancing the efficiency of the wholesale market.

# MOMENTUM TOWARDS A CLEARER VIEW FOR SYSTEM OPERATORS



# NETWORK REGULATION THAT BOOSTS EFFICIENCY

### Improved network regulation – for better electricity distribution

While the electricity transmission grid is still subject to "cost plus" regulation based on annual cost audits, since 1 January 2006 some Austrian electricity distribution system operators have enjoyed incentive regulation, which has now seen out two four-year regulation periods. The second incentive period expired at the end of 2013. The third regulation period, which began on 1 January 2014, will see a significant increase in the number of DSOs covered by the incentive regulation system, as all those with volumes of over 50 GWh supplied through their networks in 2008 must be included.

The allowed cost is determined at the start of each regulation period. A review of electricity system operators' costs was carried out in 2013, and the findings were used for the first time when setting the tariffs for 2014. At the same time we conducted an efficiency benchmarking procedure to compare the companies' cost drivers. Taking the audited cost base for 2011 and the results of the benchmarking exercise as a starting point, we set the companies trajectories for attainment of the target efficiency levels by the end of the regulation period. This established an initial cost base for the third regulation period and new regulation parameters for the next few years.

As in the second regulation period, socalled "expansion factors" (investment and operating cost factors) will be applied during the third period. Regulation accounts are being used for the first time in 2014 (see comments on gas market regulation). These make it possible to respond to ups and downs in revenue caused by volume swings.

### MEASURED COST STRUCTURES – A SOLID BASIS

The system operators' volume and cost structures, as determined by notice in 2013, were the basis for the calculation of the system charges that were subsequently introduced by the Systemnutzungsentgelte-Verordnung 2012 - Novelle 2014 (2012 Electricity System Charges (Amendment) Ordinance 2014) of 1 January 2014. As uniform system charges are set for each network area, there is an equalisation payment mechanism to even out the differences in the system operators' revenue (cost coverage) within a given area.

Thanks to the comprehensive cost review and the recognition of lower costs that it brought, the 2012 Electricity System Charges (Amendment) Ordinance 2014 brought electricity consumers average reductions of about 2.3% in system charges. The Lower Austria network area accounted for the lion's

### SYSTEM UTILISATION AND LOSSES CHARGES FROM 30 SEPTEMBER 2001 TO 1 JANUARY 2014

Weighted by 2011 output

| Tariff adjust-<br>ment per grid<br>level | Change in 2001-2005<br>relative to 2001 |       | Change in 2006–2009<br>relative to 2001 |      | Change in 2010-2013<br>relative to 2001 |      | Change in 2014 relative to 2001 |      | Year-on-year<br>change in 2014 |      | <b>Overall change</b><br>relative to 2001 |       |
|--|---|-------|---|------|---|------|---------------------------------|------|--------------------------------|------|---|-------|
|  | EUR m                                   | %     | EUR m                                   | %    | EUR m                                   | %    | EUR m                           | %    | EUR m                          | %    | EUR m                                     | %     |
| Level 3                                  | -6.62                                   | -12.9 | -3.24                                   | -6.3 | -2.04                                   | -4.0 | -0,93                           | -1.8 | -0.93                          | -2.4 | -12.84                                    | -24.9 |
| Level 4                                  | -6.17                                   | -11.6 | -1.10                                   | -2.1 | -1.50                                   | -2.8 | -0,62                           | -1.2 | -0.62                          | -1.3 | -9.39                                     | -17.6 |
| Level 5                                  | -59.93                                  | -19.9 | -9.47                                   | -3.2 | -7.82                                   | -2.6 | -3,22                           | -1.1 | -3.22                          | -1.4 | -80.44                                    | -26.8 |
| Level 6                                  | -27.40                                  | -13.4 | -3.88                                   | -1.9 | -4.00                                   | -2.0 | -3,51                           | -1.7 | -3.51                          | -2.1 | -38.80                                    | -18.9 |
| Level 7<br>(metered)                     | -56.71                                  | -20.4 | -13.90                                  | -5.0 | -11.90                                  | -4.3 | -4,98                           | -1.8 | -4.98                          | -2.5 | -87.50                                    | -31.5 |
| Ebene 7<br>(non-metered)                 | -308.50                                 | -24.4 | -38.80                                  | -3.1 | -27.27                                  | -2.2 | -22,75                          | -1.8 | -22.75                         | -2.6 | -397.32                                   | -31.4 |
| Ebene 7<br>(interruptible)               | -7.94                                   | -12.4 | -0.59                                   | -0.9 | -2.24                                   | -3.5 | -1,32                           | -2.1 | -1.32                          | -2.7 | -12.09                                    | -18.9 |
|  | -473.3                                  | -21.3 | -71.0                                   | -3.2 | -56.8                                   | -2.6 | -37,3                           | -1.7 | -37.3                          | -2.3 | -638.4                                    | -28.3 |

| Tariff adjust-<br>ments by grid<br>zones | Change in 2001–2005<br>relative to 2001 |       | Change in 2006–2009<br>relative to 2001 |      | Change in 2010-2013<br>relative to 2001 |      | Change in 2014 relative to 2001 |      | Year-on-year<br>change in 2014 |      | <b>Overall change</b><br>relative to 2001 |       |
|--|---|-------|---|------|---|------|---------------------------------|------|--------------------------------|------|---|-------|
|  | EUR m                                   | %     | EUR m                                   | %    | EUR m                                   | %    | EUR m                           | %    | EUR m                          | %    | EUR m                                     | %     |
| Burgenland                               | -32.3                                   | -36.1 | -6.0                                    | -6.8 | -4.1                                    | -4.5 | 0.6                             | 0.6  | 0.6                            | 1.1  | -41.8                                     | -43.4 |
| Carinthia                                | -16.5                                   | -12.6 | 1.8                                     | 1.4  | 11.6                                    | 8.9  | -0.2                            | -0.1 | -0.2                           | -0.1 | -3.2                                      | -2.5  |
| Klagenfurt                               | -3.6                                    | -15.3 | 0.8                                     | 3.3  | -0.3                                    | -1.5 | 0.3                             | 1.5  | 0.3                            | 1.6  | -2.8                                      | -12.0 |
| Lower Austria                            | -50.6                                   | -17.3 | -3.4                                    | -1.2 | -5.8                                    | -2.0 | -21.5                           | -7.3 | -21.5                          | -9.9 | -81.3                                     | -27.2 |
| Upper Austria                            | -58.6                                   | -20.6 | -16.9                                   | -5.9 | -14.9                                   | -5.2 | -7.1                            | -2.5 | -7.1                           | -3.5 | -97.6                                     | -32.5 |
| Linz                                     | -18.1                                   | -18.5 | -7.6                                    | -7.7 | -3.2                                    | -3.3 | -4.9                            | -5.0 | -4.9                           | -8.3 | -33.8                                     | -36.5 |
| Salzburg                                 | -50.0                                   | -27.9 | -13.2                                   | -7.3 | -11.1                                   | -6.2 | -3.3                            | -1.9 | -3.3                           | -3.2 | -77.5                                     | -42.8 |
| Styria                                   | -107.7                                  | -29.5 | -24.0                                   | -6.6 | -23.4                                   | -6.4 | 0.9                             | 0.3  | 0.9                            | 0.4  | -154.2                                    | -40.9 |
| Graz                                     | -14.6                                   | -29.8 | -3.1                                    | -6.2 | -0.6                                    | -1.3 | -1.8                            | -3.7 | -1.8                           | -6.4 | -20.1                                     | -41.1 |
| Tyrol                                    | -27.2                                   | -15.4 | -3.5                                    | -2.0 | -0.9                                    | -0.5 | -10.3                           | -5.8 | -10.3                          | -7.2 | -41,9                                     | -22.6 |
| Innsbruck                                | -3.3                                    | -10.5 | 1.4                                     | 4.5  | -0.3                                    | -0.9 | 0.2                             | 0.5  | 0.2                            | 0.5  | -2.0                                      | -6.3  |
| Vorarlberg                               | -9.3                                    | -10.5 | 2.0                                     | 2.3  | -2.0                                    | -2.3 | -3.7                            | -4.2 | -3.7                           | -5.3 | -12.9                                     | -15.7 |
| Vienna                                   | -81.5                                   | -20.0 | 0.6                                     | 0.2  | -2.0                                    | -0.5 | 13.5                            | 3.3  | 13.5                           | 4.0  | -69.3                                     | -17.1 |
| Kleinwalsertal                           | -0.1                                    | -6.1  | 0.0                                     | -1.8 | 0.3                                     | 14.1 | -0.1                            | -5.8 | -0.1                           | -6.1 | 0.0                                       | 0.3   |
|  | -473.3                                  | -21.3 | -71.0                                   | -3.2 | -56.8                                   | -2.6 | -37.3                           | -1.7 | -37.3                          | -2.3 | -638.4                                    | -28.3 |

### Table 1

System utilisation and losses charges, 2001–2014

Note on the change in 2014: as the 2013 adjustment procedure resulted in a general increase in charges, the year-on-year percentage change of 2.3% is higher than the change relative to 2001, which was 1.7%.

Source: E-Control

share of the overall savings, while Linz and Tyrol were the next-largest contributors. The regulatory cost base shrank by EUR 37.4 million (m) year on year, and the Lower Austria network area was responsible for EUR 21.5m of the total. The main counterweight to the reductions was the Vienna network area, which recorded an increase in costs of about EUR 13.5m.

In the non-metered consumer segment, the flat rate portion of system utilisation charges



CHANGES IN AVERAGE AUSTRIAN ELECTRICITY SYSTEM CHARGES SINCE 2001, cent/kWh

Source: E-Control

payable to most of the system operators rose. The system utilisation charges are influenced by a number of factors, and the changes were driven both by investment costs and by volume trends.

**COMPETITION THAT PAYS DIVIDENDS – SAVINGS OF ALMOST EUR 640M SINCE 2001** Since E-Control took up its regulatory activities in 2001, reductions in system charges have cut consumers' bills by almost EUR 640m per year. On average the charges are more than 28% lower than in 2001. However, continued investment needs and increases in electricity system operators' costs will limit the leeway for reductions in the system charges for some time to come. Stagnant supply volumes in recent years mean that there is no prospect of a reduction in the charges.

### Gas market – investment on track

### INVESTMENT SURGE AND VOLUME FALL – BAD NEWS FOR GAS SYSTEM CHARGES

As in the foregoing periods, heavy investment - totalling over EUR 400m – in the Südschiene and Westschiene transmission pipelines up to the end of 2013 had a major impact on the *Gas-Systemnutzungsentgelte-Verordnung* 2013 – Novelle 2014 (2013 Gas System Charges (Amendment) Ordinance 2014) The Südschiene and Westschiene have a significant bearing on cost determination, as the compensation for investment represents almost 40% of the network level 1 costs and some 15% of the total network costs in the eastern market area.

To cover investment in distribution networks and additional operating expenses during

the incentive regulation period, there are an investment and an operating cost factor. They are intended to create additional investment incentives for distribution system operators. They are mainly designed to promote increased network penetration, resulting in better use of existing networks. The two factors ensure that distribution system operators are able to run their systems safely and reliably, and that they can extend their networks to win new customers.

The three-year volume average for the years for which the most recent statistics are



SYSTEM CHARGES FOR A TYPICAL CONSUMER, 15,000 KWH, GRID LEVEL 3, cent/kWh

Figure 3 System charges for a typical consumer, 15,000 kWh, grid level 3

Source: E-Control

available is applied. The reference supply volume for the current gas system charges ordinance is the average for the 2010–2012 period. Due to the fact that 2009 was no longer a base year the reference supply volume increased slightly as compared to the previous review procedure. Since not only the volume supplied over the previous three years but also the current offtake load is applied, the allowed costs relate to a significantly lower reference volume. This decline was mainly driven by plummeting power station use.

The regulation parameters for the second incentive regulation period required the system operators to cut their costs by between 2-5%, depending on their relative efficiency. However, these savings only partly offset the cost push effect on tariffs of inflation, the reference supply volume, and investment in some network areas.

Large adjustments to the system charges in Styria and Lower Austria (see Figure 3) were chiefly necessitated by spending on the Südschiene pipeline, which was not offset by any revenue due to the bleak market situation confronting gas-fired power stations. An increase in system charges in the Vienna network area also reflected the rise in uncontrollable costs. The change in the charges in the Upper Austria network area was primarily caused by first-time use of the regulation account. In Vorarlberg, the increase was due to the fact that the distribution area manager began reserving capacity at entry points to the Vorarlberg market area from the German grid centrally on 1 October 2013, owing to the move to a new market model. The tariff determination procedure took account of these costs on a full-year basis for the first time.

# MOMENTUM TOWARDS

EARNIN Week's Major Better Bet

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by Assif Shamer organ acting and diff to mobile org

February 11, 201

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# COMPETITION THAT KEEPS ON BEARING FRUIT

### Rising power

### **BY PUBLIC DEMAND –**

### **GRID CONSUMERS LIFT ELECTRICITY USE**

Total domestic electricity demand climbed by 0.45% and power offtake from the public grid rose by 1.9% in 2013. Overall growth was therefore somewhat lower than in 2012, while the increase in withdrawals from the grid was about the same. After adjustment for leap days there was a total gain of about 0.8% – roughly equal to the rise in 2012 – while the growth rate for public supplies was considerably faster at 2.2%. The key factor behind the latter trend was significantly lower temperatures in the first quarter. The discrepancy between total demand and public grid offtake, also seen in the preceding periods, suggests that the power demand of small and medium – and especially household – consumers in part recorded above-average growth, while that of large (industrial) consumers probably tended to flatline or fall.

### Good under pressure – strong performance from hydros

2013 was another good year for water yield, reflected in an energy capability factor of 1.07. However, water supply had also been relatively high in the previous year, with the hydro industry delivering an energy capability factor of 1.11, and output from run-of-river



Real GDP, % (left) 🥖 Temperature, °C (right) 🥖

Electricity demand, % (left)

Figure 4 Factors influencing domestic electricity demand

Sources: E-Control, Oesterreichische Nationalbank (OeNB), Central Institute of Meteorology and Geodynamics (ZAMG) and Austrian Institute of Economic Research (WIFO)







Source: E-Control

power stations decreased by 3.6% in 2013. Storage power stations also generated less electricity than in 2012, but it should be noted that this was a year of very high growth. Wind power stations produced 9.6% more, and "other" generation - for which there are no intra-year statistics broken down into components - was up by a sizeable 10.7%. Thermal generation dropped by 16.8%, depressed by the fact that dispatching of gas-fired power stations dived by almost one-third. Due to the declines in hydro and thermal generation total domestic electricity output was 6.0% lower than in 2012. The gap between rising electricity consumption and shrinking domestic generation was

partly filled by net imports, which more than doubled, running at just over 7 TWh during the first three quarters of 2013 compared to 2.8 TWh in the like period of 2012.

Lower water yield and technical and economic factors probably contributed to a fall in the quantity of water held at storage power stations, to the equivalent of 1.9 TWh as at year-end 2013 (end-2012: 2.2 TWh). Stocks of fossil fuels at thermal power stations slid to the equivalent of 5.5 TWh (end-2012: 6.4 TWh).





Figure 6 Annual storage levels and fuel stocks at month-end

Source: E-Control

### CONSUMPTION, PRICES, ATTENTION – ALL HIGHER THAN IN 2001

Electricity price regulation ended with the advent of market liberalisation in 2001. The system charges are set by the regulatory authority, while taxes and levies are set by the federal and provincial governments and local authorities.

# Good news for household consumers – price rises quiet since 2009

Overall electricity prices (energy price plus system charges, taxes and levies) fell in the

run-up to and immediate aftermath of full market opening in October 2001, mainly as a result of incipient competition (see Figure 7). The price spike in June 2000 is explained by the doubling of the energy levy. Prices increased steadily between early 2002 and the end of 2008 – a trend that was only interrupted by reductions in the system charges, which are usually reset by E-Control at the beginning of the year. As a result of the economic crisis prices have largely gone sideways since early 2009, with only minor fluctuations. Reductions in overall prices as a result of cuts in system charges have mostly been quickly cancelled out by a number of retailers raising their energy prices. The electricity consumer price index surged in January 2013 to hit 135.7 – its highest level since 1999.

The five-point jump during the month was due to increases in the system charges in some areas as well as higher renewable electricity charges.

Table 2 presents the energy price changes in 2013 in detail. There are wide variations in the

overall electricity prices in different network areas. In recent years the price differentials between the cheapest and most expensive Austrian incumbent have always ranged between 20% and 30%. This is explained by the firms' differing marketing strategies and distribution and procurement costs. Since the system charges also vary from network area to network area, and consumers in urban areas (e.g. in Vienna) often still pay consumption levies, these cost components, too, are not identical everywhere in Austria.



Figure 7 The electricity CPI, over time (October 2001 = 100)

Sources: Statistics Austria and E-Control

| ELECTRICITY PRICE CHANGES IN 2013 |              |              |  |  |  |  |  |
|-----------------------------------|--------------|--------------|--|--|--|--|--|
| Supplier                          | Commencement | Energy price |  |  |  |  |  |
| Stadtwerke Kapfenberg             | 01.01.2013   | 4.03%        |  |  |  |  |  |
| Verbund                           | 01.09.2013   | -13.00%      |  |  |  |  |  |
| Wien Energie                      | 01.10.2013   | -3.44%       |  |  |  |  |  |
| EVN                               | 01.10.2013   | -3.41%       |  |  |  |  |  |
| Energie Burgenland                | 01.10.2013   | -3.79%       |  |  |  |  |  |

Table 2Electricity pricechanges in 2013

Energie Burgenland Energie AG Energie Graz GmbH Energie Klagenfurt GmbH EVN Innsbrucker KB KELAG Linz AG Salzburg AG Steweag-Steg Tiwag VKW Wien Energie

### Figure 8

Household electricity prices (energy, system charges, taxes and levies) by grid zones, excluding discounts; standard product offered by the local supplier, 3,500 kWh/year





Source: E-Control

Source: E- Control

### THE ITCH TO SWITCH – SHARP RISE IN CHURN RATES

Over 114,000 electricity consumers changed suppliers in 2013, for a switching rate of 1.9%. This was the first time that more than 100,000 consumers had availed themselves of their right to choose in the space of a year, and by comparison a total of 64,684 customers, or 1.1% of all electricity consumers, switched in 2012. The 114,000 switchers were made up of some 78,000 household consumers and almost 32,700



### IMPACT OF LIBERALISATION ON THE AUSTRIAN ELECTRICITY MARKET: SUPPLIER TRANSFERS AND SWITCHING RATES



Impact of liberalisation on the Austrian electricity market: number of supplier transfers and switching rates

Figure 9

Source: E-Control

other small consumers, as well as 3,500 load metered consumers. In 2012 only 40,540 household consumers, 21,714 other small consumers and some 2,430 load metered consumers transferred to new suppliers.

### GROUNDED - NO LIFT-OFF FOR WHOLESALE PRICES IN 2013

Like its predecessor, 2013 was a year of low prices and scant volatility. The dayahead baseload price index held below the EUR 30 per megawatt hour (MWh) mark for much of the summer – a further marked reduction compared to 2012, as Figure 10 reveals. For many hours, the feed-in priority for subsidised renewable energy sources in Germany, which is decoupled from supply and demand, drove the merit orders that hold the key to pricing. At the same time low  $CO_2$ and coal prices continued to make coal-fired power generation cheaper than gas so that coal-fired plants were often used as standby capacity.

### Weak futures

Futures prices continued to slide in 2013. Only at the start of the winter did contracts for delivery in 2014 and 2015 briefly test the EUR 40/MWh mark. The upturn was short-lived, and towards the end of the year prices subsided to EUR 36/MWh. At the start of 2012 futures had been in the order of EUR 52/MWh. From the spring of 2013 onwards near periods were dearer than those further out, and contracts for delivery in 2015 traded lower than 2014 futures. This was mainly because of the market's expectation of good availabilities of generating capacity with low marginal costs, such as nuclear, wind, photovoltaic and coal power stations, and its belief that gasfired stations would remain uncompetitive. Meanwhile, in view of Europe's continued economic woes there is little reason to expect a dramatic surge in industrial demand. The market sees the situation changing in the medium term because of Germany's decision to scrap its nuclear capacity and the planned decommissioning of older thermal power stations. A look at the historic price trend shows that year-ahead contracts have now retreated to the same nominal price level as in 2005.

### Knowing who's who thanks to unbundling

Following the instigation of abuse proceedings all the electricity distribution and transmission system operators changed their corporate identities to prevent them from being confused with the vertically integrated companies, and in particular the electricity retailers.

Both of the transmission system operators - Austrian Power Grid AG and Vorarlberger Übertragungsnetz GmbH - are certified. Our unbundling oversight activities are currently focusing on the contracts between the independent system operators and the vertically integrated companies.



2013 /

EXAA spot electricity prices, baseload index, seven-day sliding average

Source: EXAA and E-Control calculations





Figure 11 Price movements on the EEX electricity futures market, annual baseload contracts for delivery in 2014 and 2015

Source: EEX





Source: EEX and E-Control calculations

### Rollercoaster ride for the gas industry

### **NO CHEER FROM BIG FREEZE -**GAS DEMAND DOWN AGAIN

Domestic natural gas consumption was down again in 2013 after dropping in both of the two previous years. The decline was about the same as in 2012, at 4.7%. The main factor behind shrinking demand was a year-on-year decrease of almost a third in the use of gas-fired generating capacity. Consumption by households is thought to have grown slightly or at least held steady.

The prime influence on the demand for natural gas is temperatures, because of the use of the fuel for stand-alone central heating

systems and district heating from combined heat and power stations. Economic factors - especially competition from other primary energy sources - also play a key role in power station dispatching decisions and hence in gas consumption.

The monthly demand figures during the 2013 calendar year present a very mixed picture. During the first quarter there was a decline of 2.6%, despite growth of 3.9% and 18.3% in January and March, respectively; these gains were more than offset by a 21.5% plunge in February. The second quarter saw overall demand growth ticking over at 0.9%, on the



Figure 13 Factors influencing domestic gas demand

Source: E-Control, Oesterreichische Nationalbank (OeNB), Central Institute of Meteorology and Geodynamics (ZAMG) and Austrian Institute of Economic Research (WIFO)

back of decreases in April and June and an upturn in May. Domestic demand slipped by 6.6% in the third quarter, although it advanced by 3.4% in September. Consumption sagged by 8.6% in the fourth quarter, hit by year-onyear falls in all three months.

## Gas inventories comfortable – despite increased withdrawals

During the first three quarters of 2013 storage movements were the main influence on the natural gas balance. Storage refilling began relatively late, but then went ahead rapidly in the third quarter, resulting in a 12.3% increase in injection. Since withdrawals almost doubled over the first nine months of 2013 more gas was withdrawn from storage than was added to stocks. Net injection was more than ten times higher during the same period in 2012. Net imports also diminished, and there was an export surplus in each of the first three months of 2013, due to the seasonal inventory build. Domestic production slid by more than a quarter.

As a result of the change in the storage management trend inventories stood at 5.5 billion normal cubic metres (bn N cu m), equivalent to 61.5 TWh, as at the end of September. This corresponded to 73.8% of capacity, compared to 89.6% at end-September 2012.





Figure 14 Monthly gas balance

Source: E-Control



// Legal framework // Network regulation // Competition // Consumer activities // Security of supply // Market integration // Renewable electricity

Month-end gas storage levels

Source: E-Control

### **RIDING HIGH -**

### **CONSUMER PRICES SCALING NEW PEAKS** Household consumers

The Statistics Austria gas consumer price index (CPI) reflects the evolution of gas prices over time. Shortly before gas market liberalisation in October 2002 the gas CPI dipped, and it stayed below the 100 mark until June 2003. However, it then climbed strongly and hit 152.9 in the wake of the January 2009 gas crisis, only to retreat sharply after the emergency was over. In February 2013 it returned to the high of 155.5 first seen in February and March 2012, but then eased back to stand at 153.7 by October.

In 2013 four suppliers raised their gas prices by between 7% and 15%, while six introduced price reductions ranging from 3-11% (see Table 3).

The gap between the total cost of gas when buying from the cheapest and most expensive incumbent has widened over time, and was about 30% by December 2013 (see Figure 17).

### **GAS CHURN RATES - WHEN PRICES CLIMB MORE SWITCHERS TAKE THE PLUNGE**

2013 saw a sharp year-on-year rise in the number of switchers among gas consumers (see Figure 18). Over 33,800 changed



Source: Statistics Austria and E-Control









Household gas prices (energy, system charges, taxes and levies) by grid zones, excluding discounts; standard product offered by the local supplier, 15,000 kWh/year

Source: E-Control



## **IMPACT OF LIBERALISATION ON THE AUSTRIAN GAS MARKET:**

Metering point transfers Switching rate

#### Figure 18

Impact of liberalisation on the Austrian gas market: supplier transfers and switching rates

Source: E-Control

suppliers, for a churn rate of 2.5% - the highest since market liberalisation. The vear saw 2.4% of all household consumers. 3.4% of "other" small consumers and 5.6% of load metered consumers transfer to new suppliers.

### **NO WHOLESALE VOLATILITY -**SPOT MARKET MOSTLY CALM

Spot gas prices were generally comparatively stable, and on the CEGH market the dayahead price settled at around the EUR 27 mark. Import prices, which are shaped by long-term contracts, ran at EUR 29/MWh. However, the prices of short-term products spiked in late March owing to a combination of circumstances, and were at or beyond EUR 40/MWh at all the trading hubs for some days. The run-up began in Britain, where an outage of the Interconnector link with the continent, combined with low stocks, resulted in a record price of EUR 42/MWh on 22 March 2013. The price surge spread to continental Europe on the following day. The situation was exacerbated by extremely low temperatures for the time of year, and low percentage full rates at storage facilities - especially in France and the UK - which boosted demand for gas in storage in Germany, forcing prices up there as well. Meanwhile, there was a dearth of liquefied natural gas (LNG) shipments into Europe. Restoration of the pipeline link and higher temperatures soon calmed the market.

### Shale gas revolution -

### competitive advantage for the US economy

It is instructive to compare Europe with the USA. Until recently, most energy models and forecasts were predicated on the belief that

| GAS PRICE CHANGES IN 2013                                       |              |              |  |  |  |  |  |
|---|--------------|--------------|--|--|--|--|--|
| Supplier  | Commencement | Energy price |  |  |  |  |  |
| Salzburg AG   | 01.01.2013   | 8.29%        |  |  |  |  |  |
| Stadtwerke Kapfenberg   | 01.01.2013   | -10.90%      |  |  |  |  |  |
| Tigas   | 01.01.2013   | 7.26%        |  |  |  |  |  |
| Energie Ried  | 01.01.2013   | 9.68%        |  |  |  |  |  |
| goldgas - customers attracted between 1 May and 31 October 2012 | 01.07.2013   | 15.27 %      |  |  |  |  |  |
| Wien Energie  | 01.10.2013   | -3.42%       |  |  |  |  |  |
| EVN   | 01.10.2013   | -3.51%       |  |  |  |  |  |
| Energie Burgenland  | 01.10.2013   | -3.70%       |  |  |  |  |  |
| Stadtwerke Bregenz  | 01.10.2013   | -5.44%       |  |  |  |  |  |
| VKW   | 01.10.2013   | -5.44%       |  |  |  |  |  |

Table 3 Retail gas price changes in 2013

Source: E- Control



Source: GoBoerse, OeNB, Heren and E-Control calculations

the USA would remain a net energy importer. Technological progress and modern production techniques have turned this assumption on its head, and within the next two to three years America could be exporting significant quantities of oil and LNG. The much discussed "shale gas revolution" is not confined to the production of gas from shale formations by



gas prices in Europe and

means of fracking, but also concerns increased exploitation of other unconventional oil and gas reserves such as tight oil. Since there are limits to the transportation of oil and gas over long distances, neither has a global market and both are subject to regional



Source: GoBoerse, OeNB, Heren and E-Control calculations



Figure 21 Day-ahead price trends at European gas hubs

Sources: CEGHEX and Heren
price differences. At present these spreads are particularly dramatic in the case of gas. While natural gas only fetches about EUR 10/ MWh at the principal trading hub in the USA, Henry Hub, it costs about EUR 27/MWh at the most liquid hub in continental Europe, the Dutch TTF. Figure 20 depicts movements in the prices of the benchmark Brent (Europe) and WTI (USA) crude oil grades. Similarly to the crude market, there were no clear signals from the gas futures market. On the Dutch TTF and the German NCG and Gaspool markets, annual contracts for delivery in 2014 failed to establish themselves beyond the EUR 27/MWh resistance line for long last year. Not until near the end of the year did prices nudge towards EUR 28/MWh, partly as a result of the nearing expiry date.



/ TTF / NCG / GUD

Figure 22 Movements in gas wholesale prices, annual contracts for delivery in 2014

Sources: EEX and ICE

#### Unpicking dominant firms – the importance of gas unbundling

Following the initiation of abuse proceedings, all the gas distribution and transmission system operators changed their corporate identities to prevent them from being confused with the vertically integrated companies, and in particular the gas retailers. During the year a transmission system operator (Gas Connect Austria GmbH) was certified as an independent system operator (ISO). Our unbundling oversight activities with respect to this company are currently focusing on the contracts between the ISO and the vertically integrated company. We expect the two other transmission system operators – Baumgarten-Oberkappel GasleitungsgesmbH and Trans Austria Gasleitung GmbH – to restructure themselves so as to achieve unbundling compliance and qualify for certification by the first quarter of 2014.

## TAKING CONSUMER RIGHTS TO NEW LEVELS

•••



## CONSUMER ACTIVITIES THAT MAKE A REAL DIFFERENCE

#### Online services – always worth a look

The target group-based design of our website continued to prove its worth in 2013 and was the foundation for satisfying growing interest in certain issues, in particular from energy consumers. This is reflected in the consistently low average bounce rates of around 10% for all start pages and online tools. The number of visitors to the E-Control website rocketed by almost 50% in 2013, to 1.3 million. A total of over 8 million pages of content were viewed.

The Consumers section remained the most frequently visited part of the site, accounting for 5 million of the total number of pages accessed, followed by the Businesses and Market players sections. Although the latter section is aimed at a relatively narrow audience, it is extremely heavily used. The remaining page hits were fairly evenly spread between other areas of the E-Control website, such as Press, Statistics and Publications.

#### THE TARIFF CALCULATOR: MORE POPULAR THAN EVER

Our functional online applications remain the primary reason for visiting the E-Control website. In 2013 the rise in the use of these tools outpaced that in the total number of visitors to the website.

More than three-quarters of a million consumers used the tariff calculator to identify the most affordable gas and electricity prices – a year-on-year jump of over 70%. Demand for comparisons of electricity prices shot up by around 76%, which was

significantly stronger than the rise in requests for gas price comparisons, which went up by some 30% year on year.

Use of the mobile tariff calculator – a specially adapted version of the application for smartphones – was over three times higher, clocking up well over 40,000 visits.

#### UP AND RUNNING: THE E-CONTROL ENERGY SAVING CHECK

Since its launch in 2010 the energy saving check has become extremely popular. The application, which enables consumers to identify potential savings in household energy consumption, was used more than 120,000 times – more than double the rate in 2012.

#### SAVINGS FOR SMEs – JUST A MOUSECLICK AWAY

The SME energy price check was introduced at the start of 2012 and allows businesses to compare individually negotiated energy prices with those paid by other companies in the same sector. Considering the size of the target group, which is far smaller than the household segment, the application has also got off to a good start with a total of 12,000 visits.

#### THE BEST DEAL FOR DRIVERS: PETROL PRICE DATABASE REMAINS POPULAR

E-Control's most widely used application in 2013 was again the petrol price database (www.spritpreisrechner.at) launched at the request of the economy ministry, although the

number of visitors dropped slightly, probably as a result of the decline in fuel prices during the year. The tool, which lists the cheapest filling stations close to the user's address, registered some 4.5 million hits during the year.

#### THE SME TARIFF CALCULATOR: DOING OUR BIT FOR THE ECONOMY

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 indicate that the application will attract a large number of users. The tool allows small and mediumsized enterprises with electricity consumption of up 100,000 kWh and gas consumption of up to 400,000 kWh to compare all electricity and gas tariffs.

## SOCIAL MEDIA – MOVING MOUNTAINS IN THE DIGITAL WORLD

In 2010 E-Control entered the world of social networking by launching pages on Facebook and Twitter, the world's leading platforms, with the aim of building a reputation as a trusted partner for users with an interest in energy issues. The shift from mass media towards masses of media has seen oldstyle one-to-many communications giving way to one-to-one contacts. These rapidly growing online communities are increasingly becoming a vital channel for reaching consumers and providing them with important information. In line with the personal nature of these forms of communication, in 2013 our joint Executive Directors both launched their own Facebook and Twitter pages. So far,

E-Control's Facebook page and the Directors' profiles have received Likes from around 3,540 users. The viral effect of Facebook means that E-Control has contacts to some 70 million people. Such a wide reach could otherwise only be achieved using traditional mass media.

E-Control uses Twitter to publicise important dates and distribute press releases, draw the community's attention to interesting articles in the press, and pass on hot tips about potential savings. On average, one to two tweets are posted every day and the reach of this channel as well as its reputation as a reliable source of information are growing steadily. At present E-Control and its Executive Directors have a total of more than 700 followers.

#### E-CONTROL ON THE WEB: TOPPING THE SEARCH LISTS

In the first and fourth quarters of 2013 a raft of measures were implemented that have helped to raise E-Control's profile on the world's leading search machine Google, as well as making the regulator's range of consumer services easier to find. These included a specialist information campaign featuring highly effective, state-of-the-art monitoring mechanisms. Pages on our site appear first or second in the Google results for almost all key energy-related search terms such as "electricity price", "gas price", "energy efficiency" and "saving energy". Thanks to the use of search engines and banner advertising the campaign directed over a quarter of a million users to E-Control's range of online services.

#### ELECTRICITY PRICES: INDUSTRIAL CONSUMERS BENEFITING FROM WHOLESALE PRICES

Since 2003 E-Control has carried out direct biannual surveys (in January and July) of the electricity prices paid by Austrian industrial consumers. Industrial electricity prices fell year on year in 2013. These are mainly driven by wholesale prices, due to the fact that the latter are generally built into price formulas in the supply contracts. Under the *Ökostromgesetz* (Green Electricity Act) 2012, the "additional expenses" occasioned by renewable electricity are no longer charged on by the suppliers, which has also served to push down energy prices.

#### GAS PRICES: INDUSTRIAL CUSTOMERS STILL FEELING THE PINCH

E-Control also surveys the gas prices paid by industrial consumers on a biannual basis

(January and July). The survey focuses on companies with annual gas demand of at least 400,000 MWh. In 2013 prices were above the very high levels reached in the second half of 2008 and the first half of 2009.

#### EUROSTAT SURVEY OF HOUSEHOLD ELECTRICITY PRICES: HIGH COSTS FOR AUSTRIAN CONSUMERS

In an EU-wide comparison for the first half of 2013, Austrian household electricity prices (energy and system charges, taxes and levies) landed in the top third – above the EU-28 average, but below the average in the eurozone. Including all taxes and levies, electricity was most expensive in Ireland (23 cent/kWh) and Cyprus (27.6 cent/kWh). Denmark and Germany have the highest surcharges, with taxes and levies accounting for 57% and 49% of total prices respectively.



#### EUROPEAN HOUSEHOLD ELECTRICITY PRICE COMPARISON, cent/kWh

Figure 23 Comparison of European household electricity prices (energy and system

charges), H1 2013, 2,500–5,000 kWh/year

ex taxes and levies

inc. taxes and levies

EU-17, inc. all taxes and levies

EU-28, inc. all taxes and levies

Source: Eurostat

Household electricity prices in the EU-28 countries have risen steadily in recent years, with the exception of 2009. Compared with the previous year, average prices rose by 6% in the EU-28 countries and by 7% in the eurozone in the first half of 2013.

A closer examination of seven countries (see Figure 23) reveals that Germany is the only country where overall electricity costs have increased in each of the past six years. In Austria prices were 17% higher in July 2013 than in January 2009.

#### AUSTRIA AMONG THE LEADERS IN EUROSTAT SURVEY OF HOUSEHOLD GAS PRICES

In a comparison for the first half of 2012, Austrian household gas prices (energy and system charges, and taxes and levies) were in the upper quartile and above the averages for both the euro area and the EU-28 (Figure 24). Gas was cheapest in Hungary and Romania. However, Romania also had the secondhighest proportion of taxes and levies, at 47%, behind Denmark with 56%.

#### AN ITALIAN SPECIALITY: GAS PRICE HIKES

Italy has recorded the largest jump in gas prices since January 2009, although prices have been extremely volatile over that period. Prices went up by 5% in the EU-28 countries and by 4% in the eurozone between January 2009 and the first half of 2013. In comparison, Austrian consumers saw an increase of around 25 percentage points points in the same period. Gas prices rose in all of the countries surveyed in the first six months of 2013, with Spain reporting the biggest jump (Figure 25).



Spain
France
Italy
Netherlands
Austria
United Kingdom
EU-28
eurozone\*

Germany

Figure 24 Comparison of European household electricity price trends (energy and system charges, taxes and levies), over time (2,500–5,000 kWh/year)

\* eurozone (EA-11, 2000; EA-12, 2006; EA-13, 2007; EA-15, 2008; EA-16, 2010; EA-17)

Source: Eurostat

#### EUROPEAN HOUSEHOLD GAS PRICE COMPARISON, cent/kWh



#### Figure 25

Germany /

Italy

Austria /

EU-28 /

eurozone\* 🖊

United Kingdom 🖌

Netherlands /

Comparison of European household gas prices (energy and system charges), H1 2013, consumer band D2 (5,555.60– 55,556 kWh/year), cent/kWh



Source: Eurostat



Jan. 11

11

Jul.

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IJ.

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Jan.

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Jul.

#### Figure 26 Comparison of changes in household gas prices in Europe (energy and system charges, taxes and levies), over time (5,555.60-55,556 kWh/year)

\* eurozone (EA-11, 2000; EA-12, 2006; EA-13, 2007; EA-15, 2008; EA-16, 2010; EA-17)

10

Jul.

10

Jan.

Source: Eurostat

60

Jan.

60

Jul.

#### A defining development: what is energy poverty?

In 2013 E-Control focused more closely on the issue of energy poverty and issued the first ever definition of the concept for Austria. Previously, energy poverty was determined on the basis of a single subjective question, namely whether the respondent could afford to keep their entire apartment sufficiently warm. We have now proposed a more precise definition which compares disposable income with spending on energy.

According to this definition around 90,000 Austrian households are affected by energy

#### Getting closer to consumers

#### AN INFORMATIVE PARTNER FOR EXHIBITION VISITORS

In 2013 E-Control appeared at a number of exhibitions, fielding consumers' questions on the gas and electricity industries. Visitors to the events were given information on changing their energy supplier and generating price comparisons using the tariff calculator, as well as assistance with understanding their energy bills.

#### CREATING LOCAL BENEFITS: WORKING WITH LOCAL AUTHORITIES

E-Control regularly stages free energy consultation events throughout Austria

poverty. This was the outcome of a nationwide survey of low-income households commissioned by E-Control. Until now, media reports had suggested that around 100,000 households (or 220,000 people) in Austria could not afford to heat their homes adequately. However, under E-Control's definition, it seems that different sections of the population are affected by energy poverty than had previously been assumed.

designed to inform consumers of their rights in the liberalised gas and electricity markets. In spring and autumn 2013 we provided advice in a total of 123 municipalities in eight federal provinces. Local residents received detailed information on matters such as the savings on offer from switching supplier and were able to have their energy bills checked and explained.

#### NO AGE LIMIT ON BENEFITS: ADVICE FOR SENIOR CITIZENS

Between October and December 2013 E-Control held seven advice days aimed at senior citizens. In contrast to the municipality consultation events, visitors listened to a presentation of E-Control's activities and its various consumer services. This approach

is designed to enable the participants to pass on information to family, friends and acquaintances.

#### Well received: E-Control's consumer services

#### FOR ALL YOUR ENERGY NEEDS: THE E-CONTROL HOTLINE

The E-Control energy hotline (0810 102554, cost: 4.4 cent/minute) is the central information service for gas and electricity customers, providing them with full details on the liberalised gas and electricity markets.

- In 2013 the hotline handled 7,546 calls, an increase of 18.4% on 2012. This was due to a number of factors, including E-Control's strong media presence and increased marketing of special offers (e.g. by retailers), which prompted many consumers to obtain more detailed information. Taking 2011 out of the equation (when the hotline received an exceptional 9,566 calls due to the launch of the petrol price database), the number of callers was similar to that in 2010 (7,715 calls) and significantly higher than the 6,373 calls handled in 2012.
- Besides receiving information over the telephone, consumers can also submit enquiries to the hotline in writing using an

online form, by e-mail and by post. Use of this service has risen steadily in the past few years. There was a considerable yearon-year increase in the number of written queries in 2013, to 1,413 (2012: 749), and these were swiftly dealt with either by phone or in writing.

#### Key concerns

In 2013, calls and written enquiries to the energy hotline mainly concerned tariff calculations, supplier switching and energy bills.

#### THE DISPUTE SETTLEMENT SERVICE: SIMPLY INDISPENSABLE

Once again, large numbers of gas and electricity consumers turned to our arbitration service in 2013 in an effort to resolve disputes with their suppliers. Besides handling complaints (in particular over electricity and gas bills), the dispute settlement service offers support to consumers who feel that their supplier or system operator is not giving them enough information about their rights and duties. The service also fields general enquiries about the liberalised gas and electricity markets. Providing information and clarification is becoming an increasingly significant part of the service's activities. The multitude of new statutory regulations that came into effect during the year resulted in a sharp increase in demand for advice from consumers, with the majority of enquiries made by telephone. The new rules on universal supply and the launch of the new switching platform in October 2013 were particularly important in this respect.

In terms of arbitration, proceedings are increasingly concerned with a lack of information and clarity on the part of suppliers' and system operators' customer service units, as opposed to incorrect bills and other errors made by the companies. Experience shows that a large number of customers still attempt to resolve any complaints directly with their supplier or system operator. In many cases, it appears that call centre staff are often poorly informed, mainly because they have received information on new legal regulations too late, or do not have sufficient information at their disposal. Many enquiries to the dispute settlement service could have been avoided if customers had received accurate, professional advice from companies when trying to resolve disputes directly. As a result, the job of the arbitration service frequently involves getting energy

consumers and suppliers back on speaking terms, and dealing with customer satisfaction issues. The service helps consumers to insist on transparent, comprehensible information.

#### **ROOM FOR IMPROVEMENT**

In situations where the dispute settlement service requests companies to respond to complaints, in some cases we have seen a deterioration in both the speed and quality of the answers provided. This trend is particularly regrettable for consumers who have lodged complaints against impending or recently performed disconnections, where the amount of time needed to restore supply is a decisive factor.

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

After precisely examining enquiries, dispute settlement service staff decide whether the











Source: E-Control

issues can be resolved by telephone or e-mail, or whether formal arbitration proceedings are required.

## ENQUIRIES DIRECTED TO THE DISPUTE SETTLEMENT SERVICE

In 2013 the dispute settlement service received 3,071 written inquiries, meaning that the number of gas and electricity consumers seeking assistance from the service rose by around 23% year on year. In contrast to 2012, none of the new providers that entered the market in 2013 launched high-profile publicity campaigns – in our experience these normally lead to an increase in the number of enquiries and complaints. However, a rise in demand for advice and information can also be traced back to the raft of new legislation introduced during the year.

#### SAME TOPICS, DIFFERENT YEAR

The subjects of the enquiries and complaints handled by the dispute settlement service remained more or less the same in 2013.

Most of the queries were connected with consumption and the calculation of instalments, followed by supplier switching, payment difficulties (topics such as disconnections, reminders and collection) and problems related to the cost of making and/or upsizing network connections, as well as the system provision charges.

## BRINGING ENERGY TO THE RIGHT PLACE AT THE RIGHT TIME



## SUPPLY SECURITY: NOT A SINGLE WEAK POINT

#### Security of supply: electricity

#### SECURING ELECTRICITY SUPPLIES FOR THE LONG TERM

E-Control is charged with monitoring the security of electricity supply with a view to preparing intervention measures. It assumed its responsibilities in this area following its conversion from a private limited company to a public authority on 3 March 2011. Section 21(1) E-Control Act as amended by FLG I No. 2010/110 states by means of a constitutional provision that the duties set out in the *Energielenkungsgesetz* (Energy Intervention Powers Act) 2012 fall within the regulator's remit.

The outcomes of the monitoring activities that form the basis of intervention measures may also be used for long-term planning, in accordance with section 15(7) Energy Intervention Powers Act 2012. Section 28(3) E-Control Act states that E-Control must produce a report on the findings of its monitoring of supply security, publish the report in an appropriate form and submit it to the European Commission.

#### The monitoring duties in detail

E-Control's monitoring activities under section 15(2) Energy Intervention Powers Act 2012 relate in particular to:

The supply/demand balance on the domestic market;

- Projected demand growth and available supplies;
- Additional capacity at the planning or construction stages;
- The quality and extent of network maintenance;
- Action to meet demand peaks and respond to outages of one or more suppliers; and
- The availability of electricity generating stations and networks.

#### Supply follows demand

During the reporting period E-Control used the latest version of its detailed empirical Model of Electricity Demand in Austria (MEDA) to monitor supply security. MEDA can generate detailed forecasts of electricity demand trends based on exogenous parameters such as economic and income growth, inflation and global warming.

Econometric estimates of annual peak load can be generated using the MEDA electricity demand forecast. The error correction approach used is described in detail in E-Control monitoring reports. The change in peak load, which is predicted to grow by an average of 114 MW per year between 2013 and 2020, and the maximum capacity of the available power stations is shown in Figure 29. Scenario 1 includes plants which are under construction and will be connected to the grid, while Scenario 2 also takes account of projects that have been submitted for approval. Scenario 1 is thus the more conservative prediction. It is assumed that all renewable generating projects will be implemented on account of the current legal framework. In light of the expected peak capacity of available power stations and the forecast peak loads up to 2020, no supply shortages are anticipated. ENTSO-E also expects Austria to be in a position to meet peak load comfortably up to 2025. The conservative scenario suggests excess capacity of over 10 GW in January 2020; this contrasts with a reasonable safety margin of 1.8 GW (arrived at by deducting all relevant parameters).







Source: E-Control

#### ROOM FOR NEWCOMERS: BALANCING ENERGY MARKET POWERING INTERNATIONAL INTEGRATION

Since the beginning of 2012, procurement of the control reserve has been exclusively

market-based, and is handled by the Austrian Power Grid (APG). A number of new providers entered the market towards the end of 2013. E-Control closely monitors developments on the various markets. A partnership with Slovenia geared towards the avoidance of secondary control energy needs was initiated in May. This has led to a reduction in the amount of energy called off and the related costs, as well as freeing up control reserves, which in turn boosts grid reliability.

Since July, APG has been cooperating with Swiss transmission system operator Swissgrid to procure primary control energy. Prices have dropped considerably due to higher levels of liquidity in the market and changes in bidding behaviour.

In order to address the power generation and load requirements of new market participants such as industrial companies, E-Control holds events aimed at specific target groups and provides information for them on its website. APG has set up the control energy market forum as a way of involving market participants in the development of the market rules.

Further measures are at the planning or implementation stage, including moves to increase the attractiveness of participation in this market and intensify international integration (including with Germany). Due to the unusual market situation, with low liquidity and higher non-availability of power stations, overall costs rose in 2013 despite the beneficial effects of the partnerships initiated with Switzerland and Slovenia.

#### Security of supply: gas

#### IN SAFE HANDS: AUSTRIAN STORAGE VOLUMES ALMOST UNCHANGED IN 2013

Austrian storage capacity remained at 2012 levels, with working gas volume (WGV) of 7.4 bn cu m. The LAB storage facility in Slovakia is linked to the Austrian market by the MAB pipeline. This facility has a WGV of 652m cu m and a withdrawal capacity of 285,416 cu m/h.

#### Storage facilities that benefit everyone

The percentage full rate at Austria's gas storage facilities fell year on year, and stood at 82.6% at the start of the 2013/14 gas year (2012/13: 92%). This can be attributed to the extended 2012/13 winter

withdrawal season, which lasted until mid-April following a cold March. However, the 2013/14 withdrawal season began later, in mid-November, with the result that storage levels were only slightly lower in December 2013 than in the previous year. Injections were down on the previous year due to the decline in gas consumption, in particular by power plants.

Despite significant withdrawals during the cold spell in February 2012, there was greater recourse to gas storage facilities during winter 2012/13, especially in March 2013. Injections during summer 2013 were higher than a year earlier, and the withdrawal season started two months later, in mid-November 2013.

| GAS STORAGE CAPACITY IN AUSTRIA                |                           |   |                            |                           |                                  |   |  |  |  |  |
|--|---------------------------|---|----------------------------|---------------------------|----------------------------------|---|--|--|--|--|
| Storage system<br>operator/storage<br>facility | Injection rate,<br>cu m/h | Share of total<br>injection<br>capacity | Withdrawal<br>rate, cu m/h | Share of total withdrawal | Working gas<br>volume,<br>m cu m | Share of total<br>working gas<br>volume |  |  |  |  |
| OMV Schönkirchen                               | 650,000                   |   | 960,000                    |                           | 1,780                            |   |  |  |  |  |
| OMV Tallesbrunn                                | 125,000                   |   | 160,000                    |                           | 400                              |   |  |  |  |  |
| OMV Thann                                      | 115,000                   |   | 130,000                    |                           | 250                              |   |  |  |  |  |
| Total OMV storage<br>capacity                  | 890,000                   | 34.9%                                   | 1,250,000                  | 35.2%                     | 2,430                            | 32.9%                                   |  |  |  |  |
| RAG Puchkirchen                                | 520,000                   |   | 520,000                    |                           | 1,080                            |   |  |  |  |  |
| RAG Haidach 5                                  | 20,000                    |   | 20,000                     |                           | 16                               |   |  |  |  |  |
| RAG Aigelsbrunn                                | 50,000                    |   | 50,000                     |                           | 100                              |   |  |  |  |  |
| Total RAG storage<br>capacity                  | 590,000                   | 23.1%                                   | 590,000                    | 16.6%                     | 1,196                            | 16.2%                                   |  |  |  |  |
| Astoria Haidach                                | 333,333                   | 13.1%                                   | 366,667                    | 10.3%                     | 867                              | 11.7%                                   |  |  |  |  |
| Gazprom Haidach                                | 666,667                   | 26.1%                                   | 733,333                    | 20.7%                     | 1,733                            | 23.5%                                   |  |  |  |  |
| E.ON Gas Storage<br>7fields                    | 405,000                   | 15.9%                                   | 607,000                    | 17.1%                     | 1,165                            | 15.8%                                   |  |  |  |  |
| Total  | 2,551,667                 | 100.0%                                  | 3,547,000                  | 100.0%                    | 7,391                            | 100.0%                                  |  |  |  |  |

Table 4

Gas storage capacity in Austria, December 2013

Sources: corporate websites - www.omv.com; www.rag-energy-storage.at;

www.astora.de/speicher.html; www.eon-gas-storage.de; www.gazpromexport.ru/en/haidach/



/ 2012 / 2013

**Figure 30** Austrian storage facilities, percentage full, 2012 and 2013

Source: E-Control



#### NATURAL GAS - INJECTIONS TO AND WITHDRAWALS FROM STORAGE IN AUSTRIA, GWh

Withdrawals in 2013 / Withdrawals in 2012 / Injections in 2013 / Injections in 2012



Source: E-Control

#### Benefits for all: new market model delivers greater convenience and transparency

Implementation of the new market model in January 2013 meant that system access rights and obligations were shifted onto storage operators, who now need to conclude system access agreements with system operators. They are also obliged to pay system charges, which they may pass on to storage customers. For storage customers the new rules mean they do not need to worry about the virtual trading point when they buy storage products. Furthermore, since January 2013 daily statistics on storage movements at all facilities connected to the market area have been made available on the market area manager's website the following day,

thereby improving transparency in the storage market.

#### **LOOKING AHEAD -**AND KEEPING GAS HEADED IN THE RIGHT DIRECTION

E-Control is responsible for formulating and coordinating intervention measures to safeguard supplies of electricity and natural gas in case of emergency. The Energy Intervention Powers Act 2012 provides for closer links between intervention measures in both industries. Correspondingly, E-Control carried out evaluation of emergency response mechanisms and processes for both electricity and gas supplies in a single internal project.

A key focus of this work was defining potential new intervention measures for both sectors that allow for the continued use of existing mechanisms, at least in part. The market model suggests more specific measures for the gas sector than the electricity sector, and consequently thinking and discussions with regard to natural gas supplies are at a more advanced stage.

Another change introduced by the Energy Intervention Powers Act 2012 is the inclusion of district heating in intervention measures for the gas and electricity industries. Since district heating is to a certain extent new territory for E-Control, we have gathered relevant information from district heating companies. District heating was included in exercises in Vienna and Salzburg, but E-Control still lacks detailed knowledge of the sector on a par with its expertise in the gas and electricity sectors. The scope and manner of district heating's inclusion in current and future intervention measures and processes is a major focus for the coming year.

#### Gas is a right, not a luxury

Regulation (EU) No 994/2010 concerning security of gas supply obliges suppliers to deliver natural gas to household customers in Austria, and to guarantee supply in the following cases:

 (a) extreme temperatures during a 7-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.

In line with its responsibility for monitoring compliance with supply standards, in September 2013 E-Control sent a questionnaire to all suppliers of household consumers which enabled suppliers of protected customers to submit evidence of their compliance in winter 2013/14.

### More than ready to withstand another hard winter

The various suppliers of gas to households were able to provide proof that they have sufficient quantities at their disposal to deliver gas to their customers during the winter months, including in the extreme cases specified in Regulation (EU) No 994/2010. Storage facilities continue to play an important role in supply security. Additionally, the transport infrastructure currently in place is more than adequate to ensure that no supply shortages occur. This is clear from AGGM's latest long-term plan, which puts compliance with the infrastructure standard at 233% meaning that sufficient gas supplies can be maintained even in case of disruption of the most significant gas infrastructure.

## FINDING THE RIGHT RECIPE FOR EFFECTIVE INTEGRATION



## INTEGRATION – BRINGING EUROPEAN MARKETS CLOSER TOGETHER

#### Avoiding crossed wires: international cooperation in the electricity sector

Having a say in developments in the European energy sector is vital in light of the extensive integration of Europe's transmission network and the related markets, as well as Austria's position at the heart of the Continental Synchronous Area. For this reason, E-Control is represented on numerous European working groups and coordination committees. Information on a selection of such bodies is provided below.

#### BUILDING BRIDGES: THE FLORENCE FORUM

The European Electricity Regulation Forum (also known as the Florence Forum) was set up in 1998 to discuss the creation of the internal electricity market. The forum is attended by representatives of EU member state regulators and governments, the European Commission, TSOs, electricity traders, consumers, system operators and electricity exchanges. Meetings are held twice a year, and the 2013 forums took place in Ljubljana in spring and in Milan in autumn. Discussions centred on network codes, the EU's energy infrastructure package (EIP), transparency and the regional initiatives.

#### THINK GLOBAL, ACT LOCAL: REGIONAL INITIATIVES

Under section 23 E-Control Act, the regulator is obliged to participate in the process of

European market integration, particularly at the regional level. E-Control meets this obligation by assuming various functions. It acts as the lead regulator for the Central Eastern Europe (CEE) region. In spite of differences of opinion regarding loop flows in the region, work continued on the development of a loadflow-based capacity allocation system. The main activity in this respect in 2013 was the drafting and coordination of a memorandum of understanding to be signed by the region's transmission system operators, power exchanges and regulators. This will serve as a framework agreement for subsequent phases of the project. Pursuant to section 23 Electricity Act 2010, E-Control also approved the CEE region's harmonised auction rules for 2014 by notice.

Supraregional projects are gaining in importance, as are initiatives aimed at promoting regional integration. The Central Western Europe (CWE) region has implications for Austria in terms of capacity calculation. Accordingly, since February 2011 the country has been a member of the Pentalateral Energy Forum (PLEF), which also consists of Belgium, France, Germany, Luxembourg and the Netherlands. In June 2013 the energy ministers of the PLEF member states signed a political declaration which reinforced Austria's integration into the organisation. As a result, E-Control will be involved in the regulatory aspects of the project designed to implement load-flow-based capacity calculation in the CWE region, with APG playing a part at the transmission system operator level. The project is currently in the test phase and the calculation is scheduled to come into operation in the second half of 2014. Coupling of the day-ahead markets in CWE, Scandinavia and the United Kingdom is set to come into effect in the first quarter of 2014; Austria's involvement is a consequence of the common price area with Germany.

E-Control is playing an instrumental role in the preparations for creation of a joint intra-day market between the CWE region, Scandinavia and the United Kingdom, which will also include Spain and Switzerland (known as the North-West Europe+ region). The region's TSOs and power exchanges are currently developing an IT-based capacity management and trade support system in line with a recommendation from ACER. The regulators will be monitoring the project with regard to system requirements and cost effectiveness.

Austria's border with Italy is part of the Central Southern Europe (CSE) region, where a dayahead market coupling project is also under way. In 2013 the related structures and processes were drawn up by the TSOs and exchanges, and approved by the regulatory authorities. The aim is to create a single dayahead market that also comprises the CWE region and Scandinavia. This is scheduled to go live at the end of 2014.

#### Getting the most out of the market: international cooperation in the gas sector

One of E-Control's main tasks is to support the development of the EU internal energy market. In the gas industry we play an active part in the work of ACER and the Council of European Energy Regulators (CEER). E-Control also cooperates with other regulators at regional level, through the ACER Gas Regional Initiative (GRI) South-South East region.

#### STRENGTH IN NUMBERS: COLLABORATION WITH ACER AND CEER

In 2013 our international gas activities again focused on our European agenda, and were channelled through the ACER and the CEER work programmes. The ACER's tasks include promoting cooperation between national energy regulators, developing non-binding framework guidelines and monitoring compliance with European policies.

#### PULLING IN THE SAME DIRECTION: FRAMEWORK GUIDELINES AND NETWORK CODES

In 2013 ACER's gas activities remained focused on implementation of the third energy package which, among other things, requires ACER to draft framework guidelines pursuant to Article 8 Regulation (EC) No 715/2009. These framework guidelines lay the groundwork for the drafting of detailed network codes by the European Network of Transmission System Operators for Gas (ENTSOG). The European energy regulators give ENTSOG proactive assistance with the development of the network codes in order to ensure that the latter are as closely aligned as possible with the objectives of the framework guidelines.

ACER drew up the first framework guidelines, on gas capacity allocation mechanisms and gas balancing in transmission systems, in 2011. In 2012 it delivered reasoned opinions on the draft network codes submitted by ENTSOG, in accordance with the process laid down by Article 6(4) Regulation (EC) No 713/2009.

The top priority in 2013 was completion of the Framework Guidelines on Harmonised Transmission Tariff Structures. Also in 2013, ENTSOG drew up the relevant network code based on the Framework Guidelines on Interoperability and Data Exchange Rules for European Gas Transmission Networks, which were completed in 2012. The European regulators were closely involved in this process and ACER published a reasoned opinion on the network code in late 2013.

E-Control actively followed the committee procedure for negotiations on the network codes for gas capacity allocation mechanisms and balancing in gas transmission systems. The capacity allocation network code was published in the EU's Official Journal in October 2013 as Commission Regulation (EU) No 984/2013 establishing a Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems and supplementing Regulation (EC) No 715/2009 (CAM Network Code). The relevant regulation on gas transmission system balancing is expected to appear in the Official Journal in spring 2014.

Another focal point of activities in 2013 was the drafting of guidelines on additional and new capacity to supplement the CAM Network Code). The ACER guidelines will form the basis for ENTSOG's work on a proposal for the amendment of the CAM Network Code in 2014.

In the period under review ACER took the first steps towards outlining the scope of prospective framework guidelines on trading rules, with a focus on the technical and operating requirements for system access services and system balancing. Work on the framework guidelines will begin in 2014 based on the outcome of this scoping process.

As part of its international activities, E-Control was closely involved in all of these projects, which are crucial to European market integration. The new framework guidelines have had a significant influence on domestic implementation of the Natural Gas Act 2011. The Gas Market Model Ordinance 2012 reflects the principles of the CAM Network Code. For example, the Ordinance provides for the auctioning of capacity, for marketing of bundled products by transmission system operators, and for fixed short-term and medium-term capacity quotas. The principles of the draft network code on balancing also found their way into the Ordinance - for example, in the requirement that TSOs manage their balancing energy by buying and selling standardised products on the wholesale market. Similarly, the Ordinance provides for daily balancing, with a requirement to balance deviations from schedule over the past 24 hours by the end of the day.

#### A CLEAR VISION OF THE FUTURE – REVISING THE MODEL FOR THE INTERNAL MARKET IN GAS

In 2010-11 CEER drew up its Vision for a European Gas Target Model, in close consultation with market participants. Since then, global and European gas markets have seen a number of significant changes, including the development of shale gas in the United States, the Fukushima nuclear disaster in Japan, and the rising demands placed on gas-fired power stations as sources of standby capacity to cover fluctuations in non-programmable renewable electricity generation. Legal frameworks are also being transformed by the ongoing implementation of uniform European rules in the shape of EU framework guidelines and network codes.

In response to these changes and new challenges, CEER reviews the European Gas Target Model in 2013-14, with E-Control playing a leading role.

#### MADRID FORUM: BECAUSE THE CUSTOMER IS KING

The purpose of the biannual meetings of the European Gas Regulatory Forum of Madrid, organised by the European Commission, is to discuss issues related to the creation of a true internal gas market. Representatives of the European Commission, ACER, national regulators, member states, the gas industry and European stakeholder organisations took part in the 23<sup>rd</sup> and 24<sup>th</sup> meetings of the Madrid Forum, held in April 2013 and October 2013.

At the forums E-Control gave presentations on the regulators' work on transmission

system tariff structure harmonisation and on voluntary regional implementation of the target model for the internal gas market. The 2013 forums also covered strategic issues related to the future role of natural gas, as well as revision of the Gas Target Model. E-Control was at the heart of these discussions and of developments in these areas.

#### Close to consumers: international cooperation on consumer-related issues

E-Control plays an integral part in discussions of consumer-related issues in various European bodies. An overview of activities at some of Europe's leading events specialising in customer affairs in 2013 is provided below.

#### CEER Annual Conference on Energy Customers

The second CEER Annual Conference on Energy Customers, which brings together national and international consumer protection agencies and other energy market participants such as electricity utilities, regulators and politicians, took place in Brussels in June 2013. Discussions focused primarily on the challenges associated with complaint management and its intensive use of resources, the need for close collaboration between regulators and consumer protection organisations, and ways in which the complex relationships between customers and the various market participants could be structured in order to ensure that consumers are sufficiently well informed and protected.

#### Joint CEER-ECRB-ERRA workshop

The first joint workshop organised by CEER, the Energy Community Regulatory Board (ECRB) and the Energy Regulators Regional Association (ERRA) on customerrelated issues in the gas and electricity markets was held in Vienna on 9 October 2013. E-Control was involved in staging the event, which enabled the three organisations to find out more about their counterparts' activities in relation to consumer affairs.

#### London Forum

The reports and other documentation drafted by CEER feed into the discussions at the European Commission's Citizens' Energy Forum, which took place for the sixth time in London in 2013. The forum aims to drive energy market liberalisation with regard to consumer rights and safeguarding and taking account of consumers' interests.

The participants include national regulators and CEER, national and European consumer organisations, representatives of the gas and electricity industries, and the ministries responsible for energy and consumer affairs in the EU member states.

The 2013 Citizens' Energy Forum focused particularly on increasing consumers' involvement and strengthening their position in the European gas and electricity market. The event highlighted the central role of consumers in European energy policy and the need for additional steps to improve consumer protection. Customers ought to be able to play a more active role in the market, but further work is still needed to put in place the necessary conditions. Speakers also outlined the challenges associated with greater consumer involvement in the energy market, as well as stressing the need for closer cooperation with national and European consumer organisations as a means of turning the vision of a customer-focused energy market into a reality.

#### Seeing the bigger picture: E-Control's twinning projects help to push back boundaries

E-Control has participated in twinning projects since 2007. These EU-funded initiatives are aimed at building long-term partnerships between public sector institutions in the EU member states and similar bodies in candidate countries and European Neighbourhood Policy partner countries. The goal is to create and consolidate structures in these countries with a view to promoting harmonisation with the EU's legal framework.

#### ON THE RIGHT TRACK: CROATIA'S ENERGY MARKET

In August 2012 E-Control began implementing a one-year twinning project in collaboration with the Croatian energy ministry. The project was completed in August 2013. The Austrian partners were the Austrian Energy Agency, the Ministry of Economy, Family and Youth, and the EXAA exchange.

In financial terms this was a relatively small project, with a budget of EUR 500,000, and it was timed to coincide with the run-up to Croatia's accession to the European Union.

The current situation on the country's energy market was analysed in the first of the project's four focus areas. This was followed by development of mechanisms required for a liberalised market, and moves that laid the foundations for the market development and strengthened the administrative capacity of the Croatian authorities. Specific recommendations for Croatia's energy market were drawn up in each area.

The project was extremely well received by all of the partners and by energy market participants in Croatia, and has been adopted as a best practice approach.

#### INCENTIVE REGULATION IN GEORGIA – SOLID FOUNDATIONS THANKS TO POSITIVE UPTAKE

A month after the Croatian initiative, in September 2012, we launched another twinning project, in which our partners are EXAA, Germany's Federal Network Agency and Latvian regulator PUC. This involves helping the Georgian energy regulator GNERC to develop an incentive regulation system for the country's electricity networks.

The EUR 1,100,000, two-year project is also concentrating on security of supply. In 2013 an analysis of the status quo was concluded and GNERC employees also received training on the subjects of incentive and quality regulation. On the basis of the analysis, proposals were then drawn up for a tariff determination mechanism for Georgia's electricity grid and consultations held with participants in the country's electricity sector. The response to the proposals has been positive across the board.

Further information on E-Control's twinning projects can be found on a specially designed website, at www.e-twinning.at.

#### POSITIVE DEVELOPMENT: PILOT PROJECT IN UGANDA

In addition to our twinning activities, in 2013 we were also involved in our first ever project as part of an Austrian development assistance programme. E-Control collaborated with Uganda's energy regulator ERA, and financial support was provided by Österreichische

Entwicklungsbank AG, Austria's official development bank. The Austrian Foreign Ministry requested E-Control to enter into a partnership with ERA under a project that would capitalise on our extensive experience of international cooperation and the similarities between our role and that of the Ugandan regulator.

The aim of the project was to support ERA in the performance of its duties and provide the know-how required for the organisation's future development. The EUR 155,000, ten-month project is focusing on approval procedures for new power plants, tariff determination and internal structures and organisational approaches.

# MOVING TOWARDS MORE SUSTAINABLE ENERGY



## RENEWABLE **ELECTRICITY: NATURALLY** WELL RECEIVED

#### In vogue: record renewable energy consumption

After a dip in 2011, the offtake of electricity from "other" renewable technologies small hydro) subsidised (excluding in accordance with the Green Electricity Act reached a record high of 5,057 GWh. The quantity of supported renewable energy offtaken by OeMAG including small hydro was also greater than ever before. Wind power made the largest contribution to the total, more than making up for the decline in 2011, with an increase of 18% compared to 2010.

Up to the end of the second guarter of 2013, infeed from other renewables increased year on year. The main reason for this was a rebound in wind power infeed. In the first

quarter of 2013 injections of renewable electricity into the public grid rose year on year from 11.3% to 12.7% of total supply, even though total supply from the public grid to final consumers also grew over the same period, from 28,109 GWh to 28,554 GWh.

#### WIND POWER DRIVING PROGRESS

We expect that targets for an extra 700 MW of wind power by 2015 and an extra 1,000 MW by 2020 will be met.

The relatively high costs of plant construction and power generation have led to stagnation in installed solid biomass and biogas capacity.



GPBGRs, 2002-2012

Sources: E-Control and OeMAG

#### RENEWABLE ELECTRICITY INJECTION VOLUMES AND COMPENSATION IN AUSTRIA

H1 2013 and comparison with H1 2012

|  | Infeed<br>(GWh) | Net<br>compensation<br>(EUR m) | Supported<br>renewable<br>electricity injection<br>volumes as a<br>percentage | Average<br>compensation<br>(cent/kWh) |
|--|-----------------|--------------------------------|---|---------------------------------------|
| Energy source  |                 |                                | of total supply   |                                       |
| H1 2013  |                 |                                | 1   |                                       |
| Small hydropower (supported)                                   | 696             | 36.0                           | 2.4%  | 5.17                                  |
| Other renewable generating stations                            | 2,944           | 342.3                          | 10.3%   | 11.63                                 |
| Wind power   | 1,556           | 128.3                          | 5.4%  | 8.25                                  |
| Solid biomass inc. HBF waste fired                             | 1,007           | 137.6                          | 3.5%  | 13.66                                 |
| Biogas*  | 280             | 48.2                           | 1.0%  | 17.21                                 |
| Liquid biomass   | 0.1             | 0.02                           | 0.0005%   | 12.39                                 |
| Photovoltaic   | 88              | 27.4                           | 0.31%   | 31.28                                 |
| Landfill and sewage gas  | 13              | 0.7                            | 0.05%   | 5.68                                  |
| Geothermal energy  | 0.08            | 0.003                          | 0.0003%   | 4.20                                  |
| Total small hydropower and other renewable generating stations | 3,640           | 378.2                          | 12.7%   | 10.39                                 |
| H1 2012  |                 |                                | 2   |                                       |
| Small hydropower (supported)                                   | 482             | 26.6                           | 1.7%  | 5.53                                  |
| Other renewable generating stations                            | 2,684           | 301.6                          | 9.5%  | 11.24                                 |
| Wind power   | 1,357           | 107.7                          | 4.8%  | 7.93                                  |
| Solid biomass inc. HBF waste fired                             | 1,001           | 139.8                          | 3.6%  | 13.97                                 |
| Biogas*  | 277             | 39.7                           | 1.0%  | 14.34                                 |
| Liquid biomass   | 0               | 0.0                            | 0.001%  | 12.48                                 |
| Photovoltaic   | 33              | 13.4                           | 0.12%   | 40.93                                 |
| Landfill and sewage gas  | 17              | 1.0                            | 0.06%   | 6.22                                  |
| Geothermal energy  | 0.4             | 0.02                           | 0.001%  | 5.02                                  |
| Total small hydropower and other renewable generating stations | 3,166           | 328.2                          | 11.3%   | 10.37                                 |

#### Table 5

Renewable electricity injection volumes and compensation, H1 2013 vs. H1 2012

1

H1 2013 incl. operating cost surcharges A feedstock top-up payment of 3 cent/kWh for H1 2012 was paid retrospectively in H2 2012 Based on total supply from the public grid to consumers in H1 2013 of 28,554 GWh (August 2013 figure) Based on total supply from the public grid to consumers in H1 2012 of 28,109 GWh (August 2013 figure) 2

Sources: E-Control and OeMAG, August 2013 (preliminary figures)

If the targets in the Green Electricity Act are met, and the supply of electricity to consumers from the public grid increases by 1% annually to 2015, the proportion supplied by supported renewable energy will amount to 17.7%, exceeding the target of 15% (see Table 6).

Austria has been recording increases in electricity consumption and output since 1990. In 1990, 43.5 TWh of electricity (including pumped storage, system losses and generating station own use) was withdrawn from the public grid, compared with output of 44.1 TWh; renewables accounted for 70% of consumption.

By 2012 consumption had climbed by 52% from its level in 1990. That year 66 TWh of electricity (including pumped storage, system losses and generating station own use) was withdrawn from the public grid, compared with output of 72.2 TWh. Renewables accounted for 73% of total output.

#### EXPANSION TARGETS UNDER THE GREEN ELECTRICITY ACT 2012, GWh

| Expansion plan for the attainment of targets specified in the Green Electricity Act 2012 | 2010 actual | 2012 actual | 2015 target | Expansion<br>targets,<br>2010–2020 |
|--|-------------|-------------|-------------|------------------------------------|
| Public grids – supplies to consumers<br>(forecast)                                       | 55,005      | 55,748      | 57,811*     | 60,760*                            |
| Small and medium-sized hydropower plants   | 1,258       | 1,095       | 3,008       | 3,258                              |
| Wind power   | 2,019       | 2,386       | 3,519       | 6,019                              |
| Photovoltaic   | 26          | 101         | 526         | 1,226                              |
| Biomass and biogas   | 2,526       | 2,537       | 3,126       | 3,826                              |
| "Other" green power  | 74          | 32          | 30          | 30                                 |
| Power generation from renewable<br>energy sources, 2015                                  | 5.905       | 6,152       | 10,210      | 14,330                             |
| Renewables as a proportion of supply to consumers from the public grid                   | 10.7%       | 11.0%       | 17.7%       | 23.6%                              |

Table 6

Developments in power generation from renewable energy sources: target attainment and expansion plans under the Green Electricity Act 2012

\* Reference value for 2010: 55,005 GWh (excl. losses and consumption from pumped storage); annual increase of 1%

Source: E-Control
## Green Electricity Act 2012: stimulating renewable energy production

The new Green Electricity Act entered into force in July 2012, and the changes it introduced had an immediate effect on the support scheme. The renewable energy funding contribution was applied for the first time, transferring the mechanism for supporting renewables from the energy component of the consumer bill to the system charges, thereby increasing transparency. The renewable energy funding contribution is a percentage surcharge on system charges and system losses charges, collected by the system operator; it amounted to 15.4% in the second half of 2012 and rose to 24.7%in 2013. Low-income households can apply for an exemption from the flat renewable energy charge and for their renewable energy funding contribution to be capped at EUR 20 a year.

Annual support was increased from EUR 21m at the beginning of 2012 to EUR 50m. A proportion of this amount is allocated to each type of renewable technology. Only a small part of the additional support payment allocated to small solid biomass stations

(under 500 kW) was distributed. Funds made available to some other technologies were fully utilised within a short space of time. Particularly in the case of photovoltaics, it appears that the applicable feed-in tariffs made the technology highly attractive. Since the Green Electricity Act 2012 abolished the waiting list for funding applications, OeMAG had to decline a large number of them.

The feedstock allowance for biogas plants was replaced by an allowance for operating expenses. This was set at 4 cent/kWh for the second half of 2012 and the whole of 2013. Applicants are obliged to present OeMAG and E-Control with a feedstock energy balance and statements of other operating expenses. Operating costs must be documented on ongoing basis and submitted to the economy ministry.

### Power labelling: a clearer overview for consumers

Since 2001, suppliers of electricity to end users in Austria have been legally obliged to inform customers of the mix of primary energy sources used to generate power.

mix of primary energy sources in accordance with the law. E-Control is responsible for supervising the issuance, transfer and cancellation of guarantees of origin in Austria.

Power labelling in Austria is based on guarantees of origin. Suppliers delivering electricity to end users must evidence their

In 2013, E-Control introduced a comprehensive audit for all suppliers serving end users in Austria, and collected information



Austria in 2012, approximate values

Source: E-Control

for 82.75% of the 66.03 TWh of electricity supplied from the public grid to final consumers. This included energy supplied by all of the provincial energy utilities and larger, well-known national suppliers.

Power labelling for Austria as a whole was calculated on the basis of the data collected (Figure 33).

The amount of electricity supplied from renewable sources rose significantly, from 64.4% in 2012 to 74.5% in 2013. Power generated by fossil fuels fell from 21.4% to 17.9% year on year, and electricity from other primary energy sources increased slightly from 0.27% to 0.31%. Electricity of unknown origin almost halved, making up 7.25% of the total (2012: 13.9%). The proportion of electricity generated by renewable sources according to power labelling (74.53%) correlates with the proportion of gross domestic electricity consumption accounted for by renewable sources (75.7%).

Some 74.99% of the guarantees of origin for power labelling came from Austria. Most of the foreign guarantees were from Norway. The amendments to the Electricity Act 2010 passed by the lower house of the Austrian Parliament on 3 July 2013, which introduced full power labelling, also necessitated amendments to the *Stromkennzeichnungsverordnung* (Power Labelling Ordinance) issued in 2011. The most important amendments to and provisions of the Power Labelling Ordinance are:

- Introduction of a labelling scheme for pumped storage power stations
- Abolition of quarterly attribution of quantities
- Transitional arrangement for supply of electricity of unknown origin to 2015
- Discontinuation of provisions for electricity of unknown origin from 2015

# NOTES





#### Credits

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