

**1. Key market developments in 2013****1.1. Electricity and gas market indicators****Electricity industry: key indicators**

The year 2013 was marked by a 6.1% or 4,388 GWh drop in domestic electricity production, with output numbers falling from 72,403 GWh in the previous year to 68,015 GWh. The domestic electricity consumption slightly increased by 0,4%.

Hydropower output fell by 1,872 GWh to 45,698 GWh. This was mainly due to lower levels of water supply during the second half of the year. Production from conventional plants declined by 3,287 GWh, the lion's share of which was accounted for by gas-fired power (-31.4%). Output of renewable stations went the other way, with wind power reaching 3,150 GWh and solar producing 295 GWh.

Due to low wholesale market prices, the domestic production from gas and coal was mainly subsidised through imports from Germany.

Table 1: The electricity market in 2013

	GWh (2013)	Change vs. 2012
Gross electricity generation	68,015	-6.1%
Physical imports	24,960	+7.3%
Physical exports	17,689	-13.5%
Consumption for pumped storage	5,374	-3.4%
Domestic consumption	69,912	+0.4%
Annual peak (third Wednesdays, MW)	10,872	-0.6%

Source: E-Control

Gas industry: key indicators

In 2013 total natural gas supplies to domestic consumers decreased by 4.7% to 86,890 GWh. As previously, declining use of gas-fired power stations pushed down overall consumption. Domestic production fell by 28.2% to 14,525 GWh.

Increases over the previous year were registered for both physical imports (by 15% to 519,262 GWh) and exports (by 22.4% to 451,356 GWh).



The first quarter of the year saw a continuous overhang of exports over imports. This was due to the fact that gas was withdrawn from Haidach and Seven Fields (which are partly only connected to the German grid).

Table 2: The gas market in 2013

	GWh (2013)	Change vs. 2012
Imports	519,262	+15.0%
Production	14,525	-28.2%
Withdrawals from storage	68,214	+47.5%
Exports	451,356	+22.4%
Injections into storage	60,521	+13.5%
Own use and losses	3,234	
Supplies to consumers	86,890	-4.7%
Max. daily consumption	489.4	-20.5%
Min. daily consumption	80.5	-19.4%

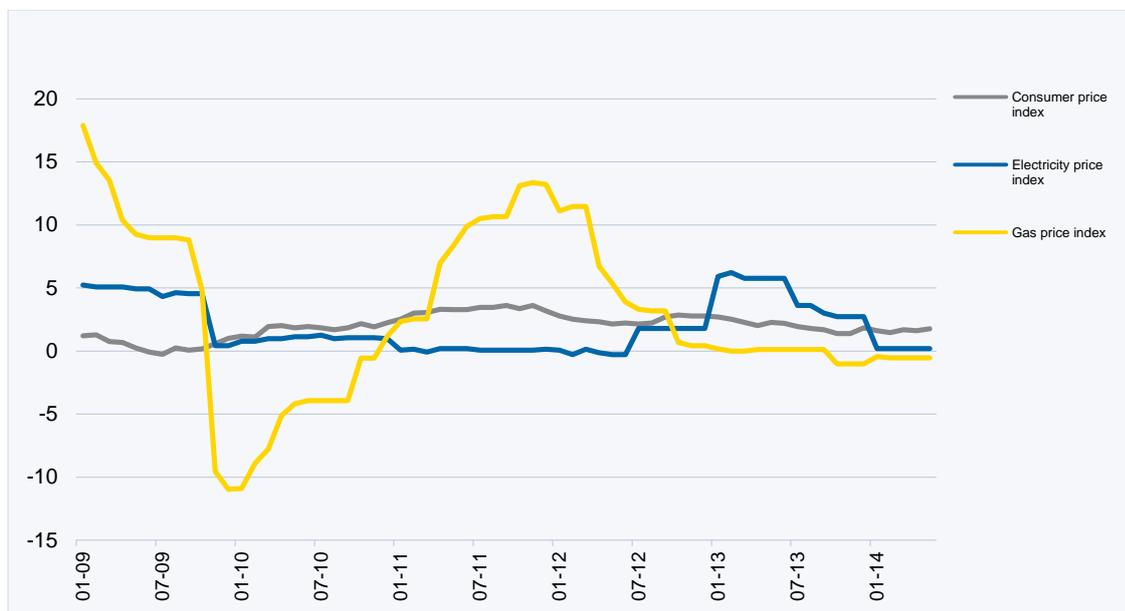
Source: E-Control

Price trends in 2013

Inflation for natural gas was down by more than 1% between October and December 2013. Combined with a sideways movement in the first six months, the result was a rate of -1% in the last quarter. Electricity inflation saw a 6.2% high in February 2013 but was down to a mere 0.2% between January and May 2014.



Figure 1: Changes in the Austrian consumer price index (CPI, grey), and the electricity (blue) and gas (yellow) price indexes (2000 = 100)



Source: Statistics Austria

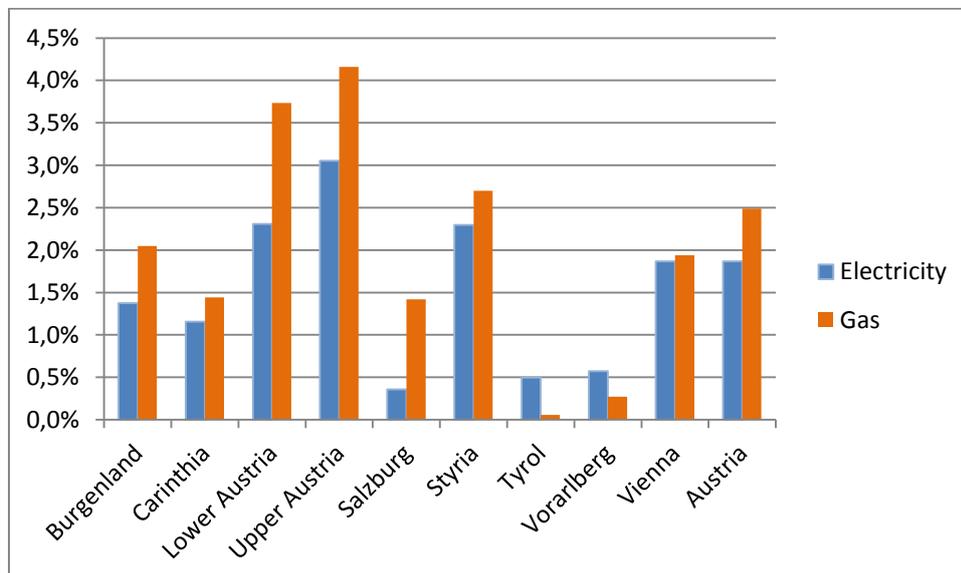
1.2. Key market developments

Electricity market

The number of offers available to consumers was up by more than one-third from the previous year. Also the switching rate grew significantly, from 1.1% in 2012 to 1.9% in 2013, which is still below the switching rate in other well-developed European markets. This makes for a total of 114,269 electricity consumers who switched suppliers last year, 78,095 of which were households. Particularly Lower Austria, Upper Austria and Styria reported switching rates above average. Following on this trend, the first quarter of 2014 saw a new record switching rate. Of 91,200 transfers, 70,950 concerned households; 68,000 of these were part of the collective switching initiative triggered by the Austrian consumer organisation VKI. We expect that additional switching potential could be tapped if cross-border competition were realised. The maximum savings from transferring from the local incumbent to an alternative supplier has doubled since 2011.



Figure 2: Switching rates electricity and gas household customers, Federal State level, in %



Source: E-Control

To counter the trend of increasing balancing energy costs, E-Control mounted an information campaign designed to attract new players to the Austrian control energy market and took other measures, such as initiatives aimed at integrating the control energy market with neighbouring countries. Since May 2013 there is an “Imbalance-Netting-Cooperation” (INC) with the Slovenian transmission system operator ELES, meaning that a generation surplus or shortfall can be used to balance the other control area, to minimize the need for secondary control. This measure has already led to cost savings of a few million Euros. Within the “International Grid Control Cooperation” (IGCC), in 2014 the cooperation was extended to other neighbouring countries such as Germany, which will also lead to a reduction in balancing costs.

With the exception of day-ahead, short-term wholesale markets display relatively high levels of concentration in the segments investigated by E-Control. Levels increase the closer a market segment is to physical fulfilment. This is due to the double limitation of these markets in terms of geographical scope (the intraday market and the control market, aside from primary control, are restricted to the APG area) and number of market participants (the strict technical requirements imposed on power stations that want to trade close to delivery reduces the number of potential players). On the other hand, Austrian market participants can indirectly participate in the intraday market of a German delivery area through EPEX, and of course they can trade off-exchange.

A study¹ has delivered new insights into interdependencies between prices, volumes and fundamental data in short-term electricity markets, with a particular focus on the day-ahead market at EPEX Spot. During the observation

¹ By E-Control and Frontier Economics.



period (2012 and 2013), both injection from wind and PV and load had significant impact on wholesale prices and on volumes traded. Intraday trade at EPEX Spot was dependent on day-ahead prices, wind and PV forecast errors and unplanned outages. Primary control prices were being pushed down by excess supply in control capacity and growing market integration with Switzerland.

Gas market

In the consumer market, gas suppliers continue to count on rebates and discounts to attract consumers, but they have stepped up the frequency of their campaigns markedly. The year 2013 saw a total of 31,051 households switch suppliers, which is a 44% increase on 2012. The first quarter of 2014 upped the game further, with as many transfers as in the first two quarters of 2013 together. Most of these transfers (about 30,000 households) were part of the collective switching initiative by VKI. Thanks to the new market model, consumers in Vorarlberg and Tyrol are now also able to switch gas suppliers. Nevertheless, the total switching rate remained at a low level (2.5%), with most of the switches taking place in Upper and Lower Austria.

At the beginning of the 2012/2013 gas year, Austrian storage levels stood at 91%, which is significantly more than the previous year. This was followed by cold temperatures throughout February, March and even April 2013, which translated into more withdrawals. The start of the storage injection period was pushed back to end-April 2013. Mild temperatures up until December 2013 resulted in above-average sales of balancing energy. Companies were long and had to sell their excess gas on the spot market.

Since April 2013, gas capacity has been allocated through the European platform PRISMA. Austrian TSOs being among those who market their cross-border capacity through the platform, E-Control decided to conduct a more in-depth investigation of gas capacity allocation. This served to replicate the results of auctions conducted through PRISMA considering price spreads between markets, regulated charges and levels of network use. The three largest Austrian cross-border interconnection points (Arnoldstein, Überackern and Oberkappel) displayed markups that resulted from arbitrage opportunities created by high network use levels and large price spreads for individual days. The markup observed in Oberkappel was close to the price spread. This was not the case for Arnoldstein, likely because of the commodity component that is part of tariffs in Italy but which was not as such accounted for in the analysis. The price markup in PRISMA capacity allocation reflects the congestion rent for shippers who would have received capacity under a different mechanism, e.g. on a first come first served basis.



1.3. Major regulatory developments

Regulatory design in 2013 was concerned with the third incentive regulation period for electricity, the second incentive regulation period for gas and the new gas market model.

Third electricity incentive regulation period from 1 January 2014

The third electricity incentive regulation period started on 1 January 2014. The incentive scheme now comprises many more electricity distribution companies, whose cost basis is recalculated at the beginning of each period. The regulatory design remains the same for the entire period. Main changes introduced at the beginning of this period concerned the calculation of the efficiency score; a frontier shift of 1.25% p.a.; a WACC of 6.42% p.a.; the calculation of the annual inflation rate (system operator price index); the introduction of the regulatory account (as in gas); and the treatment of the two-year time lag inherent in the system. The period ends on 31 December 2018; by this time, companies must have eliminated half of the inefficiency detected at the beginning.

Second gas incentive regulation period from 1 January 2013

The second incentive regulation period for gas distribution system operators started on 1 January 2013 and will end on 31 December 2017. The regulatory framework was slightly modified for this period, and the charges for 2013 were the first ones to be set using the adjusted system. Though the efficiency targets to be reached by end-2017 remain the same, the cost paths were adjusted in line with the results of a cost audit on 2011 numbers and a check on the target achievement levels. Both the system expansion factors (operating cost and investment factors) and the weighted average cost of capital were revised.

New gas market model

As planned, the new gas market model went live on 1 January 2013. Building on the experience gained during the first months of operation, we reduced the incentive on the hourly, volume-weighted average price for balancing energy purchases by the distribution area manager for consumers with hourly balancing to a symmetrical markup/markdown of +/- 3%. This change was introduced by the first 2013 amendment to the *Gas-Marktmodell-Verordnung* (Gas Market Model Ordinance) 2012 and came into effect on 1 April 2013. The same amendment raised the threshold for consumers to fall within the daily balancing regime from the previous SLP level to a contracted capacity of 10,000 kWh/h as of 1 October 2013. A second amendment to the Ordinance, again effective from 1 October, served to fine-tune the data transmission obligations between market players. Challenges with projecting the monthly balancing energy cost calculated by clearing and settlement agents and the resulting movements of the market areas' accounts were addressed in a third amendment of the Gas Market Model Ordinance 2012, effective from 1 January 2014. The new market model led to a stimulation competition and feedback from national and internal market players was generally positive.



The new market model in Tyrol and Vorarlberg

The new gas market model COSIMA (cross-border operating strongly integrated market area) went live in Tyrol and Vorarlberg on 1 October 2013. One of its main features is that it eliminates all barriers for suppliers between the two Austrian market areas and the German market area NCG by waiving the requirement for them to book capacity. COSIMA has been designed to be operational without causing the need for excessive changes to the neighbouring market areas' existing rules. The first positive outcomes of the new model have already manifested. The number of suppliers active in Tyrol and Vorarlberg has increased.

1.4. Consumer protection

The year 2013 also saw the introduction of stronger protection for electricity and gas consumers. Both the *Elektrizitätswirtschafts- und -organisationsgesetz* (Electricity Act) and the *Gaswirtschaftsgesetz* (Natural Gas Act) now enshrine the right to prepayment meters for cases where the system operator or supplier requests a collateral or prepayment. By 2015, major suppliers must have established consumer contact points that can provide information about supplier switching, energy efficiency, energy poverty and other topics that are important for consumers. The legal changes also included the possibility of switching online, i.e. of initiating a switch by sending an informal request to the desired future supplier.

Data relating to 2013 also enabled us for the first time to gain detailed insight into the most pressing concerns of gas consumers in Austria². The total number of complaints registered was 21,500 at suppliers' and 1,340 at distribution system operators'. At 168, the number of prepayment meters was low. In 8,457 cases, suspension of contract (usually failure to pay) caused gas supplies to be cut off; this makes for a disconnection rate of approximately 0.7%.

² The responsibility for monitoring the electricity market lies with the provincial authorities.