

# Austria

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## Key issues

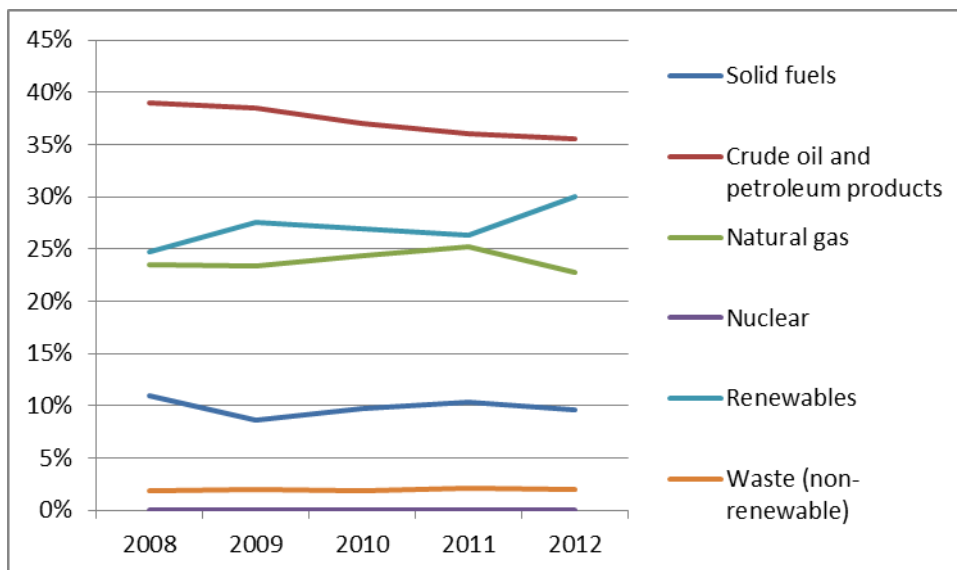
In the electricity sector, market coupling with Southern and Eastern neighbouring countries would be beneficial.

In gas, the number of system operators could be reduced in view of the new gas-market model. An extension of the gas network based on market demand is needed to enable injections and withdrawals on a firm basis from the gas storage capacities. The efficiency of the gas balancing regime should be improved in order to create a level playing field on the retail market.

## 1. General overview

Energy consumption in 2012 (33.7 Mtoe) was based largely on crude oil and petroleum products (35.54%), renewables (30.05%) and natural gas (22.8%)<sup>1</sup>. Austria has committed to reach 34.2% of RES share in gross final energy consumption by 2020. The country is showing good progress towards its European target as the RES share in 2012 was 32.1%<sup>2</sup>, well above its 2011/2012 indicative trajectory.

Figure 1: Gross inland consumption mix 2008 – 2012 (source: Eurostat)



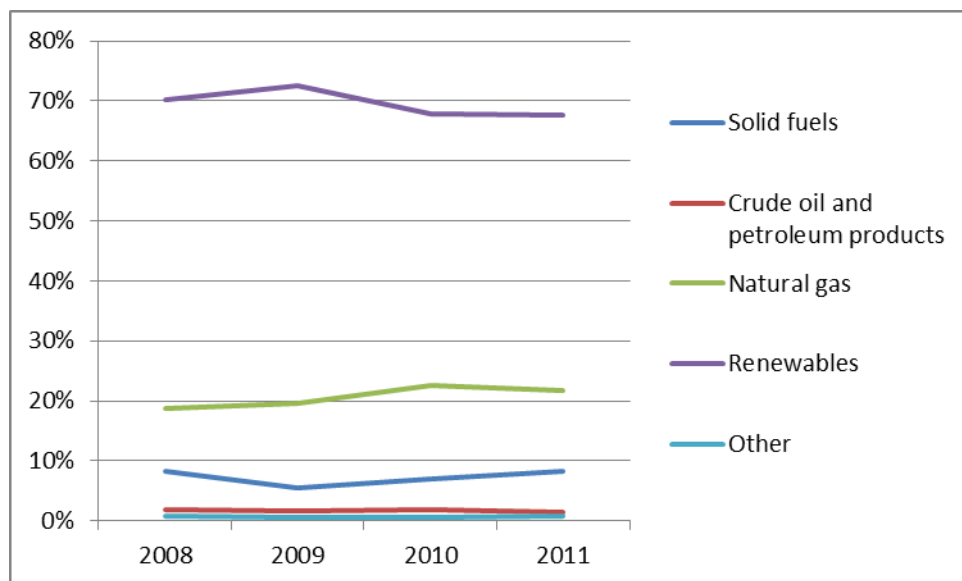
In 2011, approximately two thirds of the electricity generated (67.5%) was provided by renewables and 21.8% by natural gas.

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<sup>1</sup> Eurostat.

<sup>2</sup> Eurostat.

Figure 2: Gross electricity generation mix 2008 – 2011 (source: EU Energy in Figures - Pocketbook 2012 and 2013)



Cogeneration<sup>3</sup> accounted for 15.7% of the total electricity generation in 2011, which is in line with the last few years<sup>4</sup>. The relevant indicator for pump storage generation (base/peak spread) decreased by 10.5% (EUR 11.5/MWh) and the generation from hydro power stations reduced due to high tides and dry periods. Full load hours of gas fired power plants reduced by 17.9% in 2012 (1859 hours, 2011: 2265 hours).

## 2. Regulatory framework

### General

The Directives of the Third Energy Package were transposed into national law in 2010 for electricity and in 2012 for gas.

An important development has been the introduction of an entry-exit system in gas in January 2013, replacing the previous system based on contractually agreed transport paths. Austria has three market areas and entry-exit zone (East, Tirol and Voralberg). As the market areas of Tirol and Voralberg are neither connected with East or each other but supplied via the market area Net Connect Germany, they have been partly integrated in to the German market area Net Connect Germany (NCG) since October 2013. Approximately 95% of Austrian gas consumption takes place in the Eastern market area. The new regime foresees that any gas transported through the Austrian network is traded at a centralised virtual trading point (Central European Gas Hub – CEGH) both bilateral and exchange trades are possible. The new regime also foresees new balancing rules of which the efficiency is however not proven. The new market model delegates system-relevant tasks

<sup>3</sup> The share of electricity produced in combined heat and power plants (CHP).

<sup>4</sup> Eurostat.

to a number of system-operators beyond the TSOs and DSOs (Distribution Area Manager, Market Area Manager, Clearing and settlement agent, Operator of the virtual trading point) which leads to administrative burdens for market participants.

### **National Energy Regulator**

In 2012 the Austrian Energy Regulator "*Energie-Control Austria für die Regulierung der Elektrizitäts- und Erdgaswirtschaft*" (E-Control) had an average of 113 employees and a budget of around EUR 20 million<sup>5</sup>.

### **Unbundling**

The electricity TSO Austrian Power Grid (APG) was legally unbundled in March 2012 from its shareholder Verbund AG, whose main shareholder is the Austrian Government (51%). APG was certified as an Independent Transmission Operator (ITO). The second electricity TSO in Austria, Vorarlberger Übertragungsnetz GmbH (VÜN), whose main shareholder is the federal state Vorarlberg (51%), was certified as an Ownership Unbundled TSO in June 2012. The gas TSO, Gas Connect Austria GmbH (GCA) was for the first time certified as an ITO in July 2012 and received in July 2014 an updated certification as ITO covering the operation of WAG pipeline which was until September 2014 operated by Baumgarten-Oberkappel Gasleitungsgesellschaft mbH (BOG).<sup>6</sup> After the rejection of the application to be certified as ISO in March 2013 Trans Austria Gasleitung GmbH (TAG) was in July 2014 certified as ITO.

## **3. Wholesale markets**

### **Electricity**

On the Austrian energy exchange for electricity (EXAA, Energy Exchange Austria), electricity is traded on a day-ahead basis for delivery in Austria or Germany. In the absence of congestion, the wholesale market for electricity is fully coupled with Germany and forms a single price zone. Therefore electricity can also be traded at EPEX Spot situated in Paris on an Intraday and Day-Ahead basis for the Austrian/German delivery zone. Similarly, derivatives at EEX (European Energy Exchange) situated in Leipzig, such as Phelix Futures can be traded for Austria/Germany. Hence, through Germany, Austria is indirectly coupled with the North West European electricity market. It is not yet coupled with its Eastern and Southern neighbours.

The average wholesale electricity price was EUR 51.9/MWh in 2011 but decreased in 2012, caused mainly by the low worldwide prices for coal and emission certificates, increasing generation of subsidised RES in the joint German-Austrian price zone and a bleak economic outlook. In summer 2013 Austria has introduced an obligation for electricity suppliers supplying Austrian end consumers to provide a certificate of origin of the energy supplied. It will need to be assessed further whether this new obligation restricts imports of supplies from other Member States.

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<sup>5</sup> E-Control, Annual financial report, 2012.

<sup>6</sup> By end of 2013 the former shareholders of BOG E.ON and GRT Gaz sold their shares to OMV. As of 30 September 2014 GCA will become, by way of merger, the universal legal successor to BOG.

## Gas

The wholesale gas market in Austria was still very concentrated (Herfindahl-Hirschmann Index - HHI - of 3,371) in 2011. The wholesale gas market in particular was affected by significant price changes, which brought about major developments. On the one hand, new suppliers made use of the opportunity to enter the relatively high-priced retail gas market (including household consumers), which led to a larger spectrum of rates available. On the other hand, suppliers adapted their contracts with importers to reflect better actual market conditions, i.e. adjusting their prices to the short-term spot market.<sup>7</sup>

Being dependent on gas imports, it is essential for Austria to have cross-border transport capacity available to gas traders. In the past years, new entrants wanting to trade in the Austrian gas market faced congestions in the transmission system at the border with Germany and therefore only had limited access to transport capacity. With the implementation of the European guideline on congestion management procedures and the European network code on the allocation of capacity in gas pipelines, this situation has improved significantly.

In 2012, the average price for natural gas was EUR 26/MWh, a small increase from 2011. In 2012, the price varied between EUR 25/MWh and EUR 27/MWh, except in January and February 2012 when prices of up to EUR 39.5/MWh were recorded, which is the highest price seen at CEGH. This significant increase was due to extraordinary temperatures and lower imports from Russia. Usually spot prices at CEGH are above the German NCG prices, however in the fourth quarter of 2012 this spread was reversed. At CEGH a total volume of 48.9 bcm was traded OTC in 2012, which is a significant increase compared to 38.9 bcm in 2011. The average churn rate was 3.53 in 2012 and 3.38 in 2011. On the normal exchange 3.06 TWh was traded in total.<sup>8</sup>

The total Austrian gas demand was 4.391 Mtoe in 2011 of which approximately one third came from national production<sup>9</sup>. In 2011, the largest share of the imported gas came from Russia (52%). Austria also exported natural gas to Germany and Italy.<sup>10</sup>

## 4. Retail markets

### Electricity

The retail market can be divided into three different sections: households, small business companies and large scale consumers with special contracts. The number of active suppliers for households decreased from 143 to 139 in 2011 and for small business companies from 142 to 137 as some smaller suppliers were taken over by bigger ones. The market consists just of domestic suppliers for households and SMEs, of which 15 are operating at a national level and the remainder-wide, the others are regional suppliers. This implies that there are regionally operating suppliers. For special contract consumers the number of suppliers has not changed, giving industrial customers a chance to

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<sup>7</sup> ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

<sup>8</sup> ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

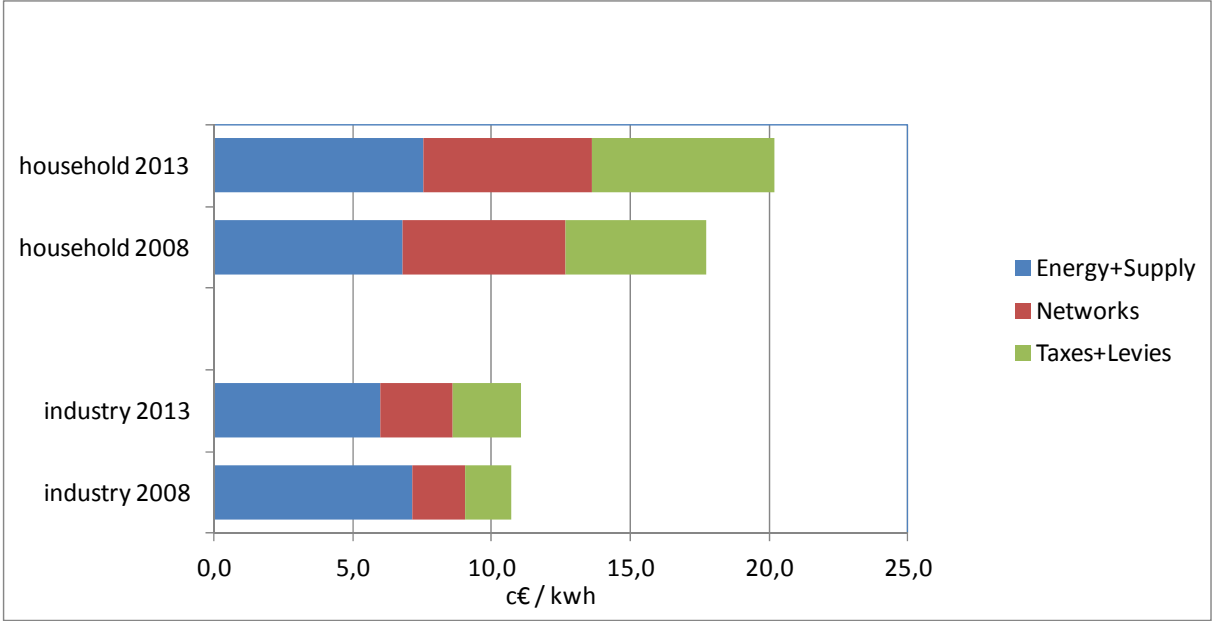
<sup>9</sup> Eurostat

<sup>10</sup> [http://ec.europa.eu/energy/gas\\_electricity/doc/at\\_energy\\_market\\_2011\\_en.pdf](http://ec.europa.eu/energy/gas_electricity/doc/at_energy_market_2011_en.pdf).

choose between 12 different suppliers.<sup>11</sup>, which are either domestic or foreign suppliers. Normally, foreign suppliers only offer contracts if a certain amount (10-20 GWh) is supplied.<sup>12</sup>

Market concentration has not changed considerably and remains at a high level given the HHI of 1,769 for household customers (2011: 1,764) and 1,685 for commercial customers (2011: 1,696). The overall market share of the three largest retailers (for households and SMEs) remained at a level of about 56% across all consumer groups. Alternative suppliers gained some market share relative to the local suppliers who still have a strong market power.

Figure 3: Electricity price change by component 2008 – 2013 (source: Eurostat, energy statistics)



The household energy price increased by 3% in 2012 (EUR 0.2224/kWh), which is higher than the average electricity price in the EU (EUR 0.2061/kWh). In 2013, household prices consisted of energy costs (41%), network costs (25%) and taxes and levies (34%). Prices for industrial customers have decreased since 2010 and in 2012 the reduction was about 4.5% for large industrial customers.

Most of the suppliers slightly reduced their prices at the beginning of 2012 mainly because the reduction of transfer prices for the mandatory acquisition of renewable energy. Following the renewal of the law in respect of renewable energy (ÖSG), the costs for renewable energy became transparent and understandable as they are determined by law. Additional price reduction due to the positive developments on the wholesale market has not been passed through to the household customers by the suppliers.

Regarding smart meters, a cost-benefit analysis came out in favour of smart meters for both electricity and gas. A Ministerial Decree mandated the roll-out of smart meters for electricity customers by the end of 2019 at the latest with a specific timetable for implementation. A

<sup>11</sup> ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

<sup>12</sup> ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

modification, in 2013, to the *Elektrizitätswirtschafts-und-organisationsgesetzes* of 2010 makes provision for up to 5% of consumers to express the wish to their supplier not to have a smart meter installed.

Regarding switching of energy supplier the switching rate dropped from 1.5% to 1.1% in 2012. In contrast, the switching rate of specially metered customers increased by almost 50% (to 6.8%) New rules, which came into force on 1 January 2013, have probably contributed to an increase in the number of consumers who subsequently switched gas and electricity supplier. During 2013, 148,000 consumers and businesses switched supplier. This represents an increase of 68% in comparison with 2012.

## Gas

The Austrian gas market is divided into two segments. Prices for small consumers (households, smaller consumers etc.) with a consumption of less than 400 MWh are published. For large customers with consumption above 400 MWh, the prices and conditions are negotiated individually. In 2012, 49% of household prices were for the energy itself, network costs accounted for 22% and VAT and energy taxes made up the remaining 29%.

Market concentration for the small consumer group is still very high (HHI: 3,726) even though it reduced by 8% in 2012. The cumulated market share of the three largest gas suppliers was 72% in 2012. The largest individual market player is EnergieAllianz Austria GmbH with a market share of 60%. EnergieAllianz Austria GmbH includes the retail companies: Wien Energie GmbH, EVN AG and Energie Burgenland AG.

In 2012, about 23,400 final customers changed their supplier (about 1.7% of all final customers in Austria). Since January 2013 the process has been further simplified, so that the switching process can be successfully completed within three weeks.

## 5. Consumers

Overall consumer assessment of the retail electricity market is above the EU average (77.0 points compared to 72.0), corresponding to 8<sup>th</sup> place EU-wide. The market is also assessed just above the average of 31 domestic services markets (15<sup>th</sup> place). The electricity market has the second highest score in the EU on the 'overall consumer satisfaction' indicator. However, consumer assessment of the retail gas market is just below the EU average (74.0 points vs. 74.1<sup>13</sup>, ranked 17<sup>th</sup>) as well as below the average of the 31 domestic services markets (ranked 21<sup>st</sup>). While the score on comparability has been increasing (although slowly) every year since 2010, it remains 4<sup>th</sup> lowest in the EU. Both electricity and gas markets have improved their performance since 2012 (respectively by 2.8 and 2.2. points).<sup>14</sup>

E-Control has launched a service hotline for all gas and electricity customers<sup>15</sup> where customers can find a wide range of information on electricity and gas markets. In 2012, the hotline recorded 6,373

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<sup>13</sup> However the difference is not statistically significant.

<sup>14</sup> 10th Consumer Markets Scoreboard,

[http://ec.europa.eu/consumers/consumer\\_evidence/consumer\\_scoreboards/10\\_edition/index\\_en.htm](http://ec.europa.eu/consumers/consumer_evidence/consumer_scoreboards/10_edition/index_en.htm)

<sup>15</sup> The hotline number is: 0810 10 25 54 (tariff EUR 0,044/minute).

calls, which is a reduction of 33.4% on 2011 when the price comparison tool was introduced. The main reasons for calling the hotline were related to questions on switching and energy bills. In addition, E-Control offers a wide range of online applications. About 500,000 customers used the so-called “Spritpreisrechner” calculator to identify the cheapest petrol station.<sup>16</sup> Furthermore, a significant number of customers checked their opportunities for saving of energy in their households.

In 2012, the rights of vulnerable customers were strengthened. If consumers fail to pay their bills, then the supplier may only switch off supply after repeatedly sending reminders, including threatening disconnection. Moreover, suppliers are obliged to deliver natural gas or electricity to vulnerable customers who claim their respective right, at their general terms and conditions in force and at rates for universal service to vulnerable customers that may not exceed the rates at which most of their customers are supplied (universal service obligation).

Whilst a protection mechanism for vulnerable customers does exist in Austria, the authorities have still to make a precise definition of the concept of vulnerable customers.

New regulatory guidance (ordinance) has been put in place defining the format of consumption information by system operators towards consumers. These measures seem to have had a positive impact on the overall consumers' assessment of both electricity and gas markets between 2012 and 2013.

## 6. Infrastructure

In accordance with the TEN-E Regulation, Austria has designated one national competent authority responsible for facilitating and coordinating the permit granting process for the Projects of Common Interest (PCIs) in gas and electricity (“one-stop-shop”).

### Electricity

The Austrian energy market faces substantial challenges due to the proposed increase of electricity from renewables and the integration of European energy markets. The high capacity high-tension 380-kV ring in Austria remains to be completed and cross-border capacities to Italy, Slovenia, Switzerland and Germany enhanced. To address these mentioned challenges extensive network reinforcements and network expansion are required. Therefore Austria is involved in 13 projects of common interest (PCI) under the guidelines for trans-European energy infrastructure, including large scale projects like the new construction of the 174 km long Salzburg line (380 kV) with a capacity of 2 x 2400 MVA. Remaining PCIs include five internal lines, three interconnectors to Italy and three hydro-pump storages.

### Gas

In gas, the network development needs to be closely coordinated with neighbouring countries especially with regard to the development of new gas sources from the Caspian Region.

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<sup>16</sup> [www.spritpreisrechner.at](http://www.spritpreisrechner.at)

Gas Connect Austria (in its role as Market Area Manager) established the second Coordinated Network Development Plan (KNEP) for the Austrian Market Area. Potential bottle-necks have been identified at the entry-exit points Überackern SUDA and ABG, 7 Fields, and the exit point Mosonmagyaróvár. Even though extension was requested on a non-binding basis for Penta West to offer guaranteed capacities for the use of storage and incremental capacity at the entry-exit point Überackern<sup>17</sup>, no bookings were made in the course of the auction of the respective incremental capacity via Prisma in March 2014. A total of six projects of common interest in the gas sector are carried out by Austria.

## 7. Security of Supply

### Electricity

Generation capacities are expected to rise by 6.7 MW until 2020. The overall generation capacity will then be 29.6 MW, what implies that there should be no issues of generation adequacy. However, in periods when hydro generation capacities are not able to generate due to high tides or dry periods and gas fired stations are no longer running, maintaining security of supply may need complementary measures.

### Gas

Given the latest survey regarding the security of gas supply Austrian suppliers fulfil the requirements of Regulation 994/2010. One important element is the storage capacities (67.8 GWh) which cover about 90% of annual gas demand (91.2 GWh).

## 8. Key indicators

Electricity		Gas	
Number of companies representing at least 95% of net power generation	145	Number of entities bringing natural gas into country	6
Number of main power-generation companies	4	Number of main gas entities	3
Market share of the largest power-generation company 2012	56.6%	Market share of the largest entity bringing natural gas	N/A
Number of electricity retailers	152	Number of retailers selling natural gas to final customers	41
Number of main electricity retailers	6	Number of main natural gas retailers	N/A
Switching rates (entire electricity retail market)	1.1	Switching rates for gas (entire retail market)	1.7

<sup>17</sup> E-Control, Coordinated Network Development Plan 2014-2023, December 2013.



Regulated prices for households – electricity	No	Regulated prices for households – gas	No
Regulated prices for non-households – electricity	No	Regulated prices for non-households – gas	No
HHI in power-generation market	N/A	HHI in gas supply market	3,371
HHI in electricity retail market	~1,800	HHI in gas retail market	~2,200
Electricity market value <sup>18</sup> (bn€)	7.265	Gas market value <sup>19</sup> (bn€)	2.658
Installed generation capacity (MW, 2011)	22,787		
Peak demand (MW)	11,617		
Number of Smart meter installed	590		

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<sup>18</sup> Market value is an estimation of the size of the retail electricity and gas markets. It is calculated using data on electricity and gas consumption in the household and non-household sectors (average bands) and annual average retail prices.