Storage market is competitive, regulator finds

Up-to-date storage report reveals information about storage market, use, customers, prices and more

Vienna (21 July 2022) – The role of gas storage in security of supply has never been as salient as today. The public eye closely followed storage developments already in 2021, attracted by insecurity on the gas market and lower-than-usual storage fill levels at the beginning of the heating season 2021/22, in particular in the facilities used by Gazprom. "The Russian invasion of Ukraine on 24 February 2022 has pushed the role of gas storage in security of supply into the limelight. The public is now very aware that 80% of the gas consumed in Austria in 2021 came out of Russia. This strong dependence has meant rising public interest in arrangements surrounding storage access and storage use," says Alfons Haber, E-Control Executive Director.

It is now important to reduce dependence from Russian gas by diversifying sources, but also to optimise use of existing storage facilities. This hinges on a well-functioning market with transparent and non-discriminatory access to storage, along with rules to ensure that storage capacity is indeed used. The storage report that is now published analyses market developments and competition on the Austrian flexibility and storage market between 1 January 2019 and 31 December 2021. It also looks at whether the access regime should be changed.

Eastern Austria home to storage facilities

Austrian storage facilities are located in the eastern market area. Technical operation of the facilities lies with OMV Austria Exploration & Production and by RAG Austria. "The Austrian storage facilities are depleted gas fields – so-called pore storage facilities – that have been converted into storage. During the reporting period, five storage undertakings were marketing the capacity from these facilities," says Haber.

These were:

- OMV Gas Storage GmbH (OGS)
- RAG Energy Storage GmbH (RES)
- Uniper Energy Storage Austria (Uniper)
- Astora GmbH (astora)
- GSA LLC (GSA)

With 26.5% (corresponding to 25.3 TWh working gas volume, WGV), OMV Gas Storage held the largest share in Austrian storage capacity. Uniper's storage capacity is used for both the German and the Austrian gas market. In addition, RAG Energy Storage is active in Austria.

"The Haidach storage facility, which has been marketed by Astora and GSA, is not currently connected to the Austrian gas grid but only to the German one. This will now change: the latest amendment to the Austrian Gas Act 2011 rules that all storage facilities located on Austrian territory must be connected to the relevant market area," Alfons Haber explains with reference to the latest developments. A direct connection between the Haidach storage facility and the Austrian gas grid is already planned. Once this is achieved, there will be two facilities that are used for both Germany and Austria: Haidach and 7-fields. The latter is located in Salzburg and Upper Austria, and is connected to the transmission and distribution system in Austria, but also to the German grid.

Part of the Haidach facility – the part which is marketed by GSA – has barely been used since the summer of 2021. Normally, storages are filled during the summer months, but this did not happen for the GSA-marketed Haidach capacity last year. This has prompted E-Control to put the latest amendment of the Gas Act 2011 into practice and transfer the rights to about 14 TWh working gas volume to RAG Austria AG, i.e. the technical operator of the facility. They have in turn entrusted RAG Energy Storage GmbH, a subsidiary they fully own, with marketing this capacity. It should be possible to start filling this capacity at the beginning of August, according to RAG Energy Storage.

Massive expansion of storage capacity

"Austria has seen a massive expansion of storage capacity since 2007. This positive development was triggered by repeated interruptions to gas transits through Ukraine. At the end of 2021, Austria had a working gas volume of 95.5 TWh. This is largely thanks to an 81% leap from 50.9 TWh in 2010 to 92,2 TWh in 2015," Haber points out, underlining the role of capacity expansion.

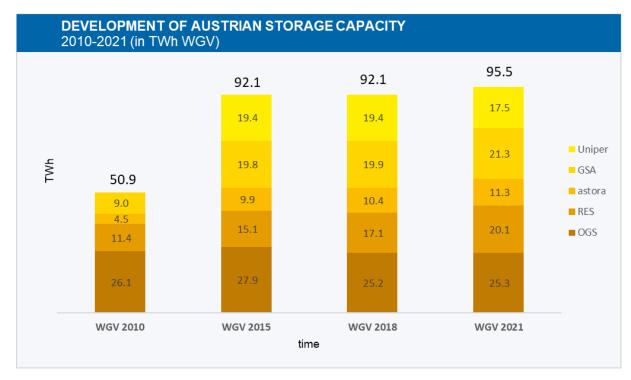


Figure 1: Development of storage capacity, 2010-2021 Source: E-Control

Overall, working gas volume increased by 87% (corresponding to 44.6 TWh) between 2010 and the end of 2021. During all this time, consumption has basically gone sideways.

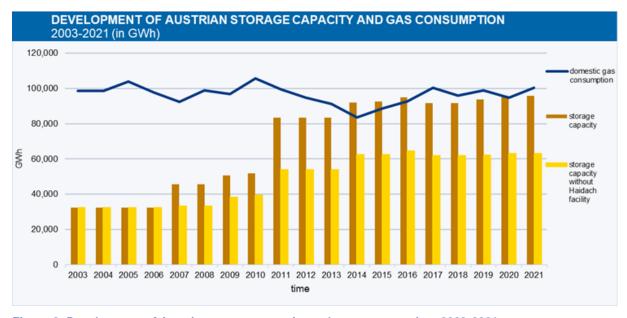


Figure 2: Development of Austrian storage capacity and gas consumption, 2003-2021 Source: E-Control

Clarity about gas ownership

By the end of 2021, the number of storage customers on the market had grown to 74. Among these were suppliers that have final customers in Austria, but also international wholesalers, according to Haber.

He also sheds light on a question E-Control is often asked: who owns all this gas in storage? "Gas in storage always belongs to whoever bought it and put it there. Normally, these are either companies that act as suppliers and serve final customers in Austria or gas traders that are active nationally and internationally. These latter sell their gas on: to suppliers, directly to large industrial consumers, or through the Austrian hub, i.e. the virtual trading point. However, the strategic reserve that was recently established belongs to the Republic of Austria," says Haber. And he explains what this means for Austria. "Most of the gas in storage is not earmarked for one national market or the other. The traders or other companies that own the gas sell it under existing supply contracts or they follow price and demand signals. But the strategic reserve, that is a different story. These are 20 TWh of gas, to be procured through a tendering procedure, that are exclusively available for consumers in Austria in an emergency situation." This is enough gas to satisfy average gas consumption in Austria for two winter months.

Storage crucial for Austria

Storage and its significance for security of gas supply in Austria have been the subject of much discussion over the past couple of months. There is no doubt that their great importance has even increased lately. But comparisons with other European countries often cause confusion. "Simply putting percentages next to each other does not make sense. Instead, we must always keep in mind how much storage capacity a country has in relation to its domestic consumption. With around 95 TWh working gas volume, Austria is in a quite unique position in Europe," Alfons Haber underlines.

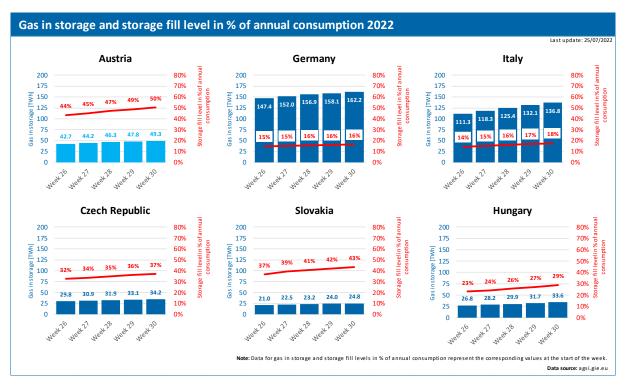


Figure 3: Gas in storage and storage fill level in % of annual consumption 2022, in selected European countries, week 26-week 30 2022 Source: agsi.gie.eu

Increasing storage fill levels

Over the past months, the federal government has put in place a variety of measures to increase storage fill levels, including the strategic reserve and a storage obligation. "Gas prices rose even further when Russia invaded Ukraine, so these were particularly important steps," says Haber.



Figure 4: Gas prices for delivery in summer 2022 vs winter 2022/23, in February and March 2022 Sources: E-Control, CEGH. As of May 2022.

Supply standard for protected customers improved further

"Verifying that the supply standard is upheld has long been an important task of E-Control. Now, it has gained even more significance, and thus we have further upped the standard. Households and essential social services are protected customers. Once a year, their suppliers must show evidence that they have enough gas in storage for a period of 30 days in the case of disruption of the single largest gas infrastructure under average winter conditions. Previously, we also accepted OTC contracts or futures as proof, but now, we have tightened the standard in the interest of security of supply," says Haber, underlining the role of storage.

UIOLI for storage introduced

In the past, storage capacity could go unused. In 2021, storage facilities were fully booked almost all of the time, but some storage customers did not fully use their booked capacity. "In particular, this was the case for the Haidach facility: GSA fully marketed their capacity, but it was not filled. This is how we have arrived at talk of Haidach being empty – and that with Haidach being the largest facility available in Austria. The legislator has now introduced the so-called use-it-or-lose-it principle – UIOLI for short. It prevents capacity hoarding: if market participants book capacity but leave it unused, it goes back to the market," Haber applauds the initiative.

Market maker for balancing energy boosts security of supply

The idea of a market maker on the Austrian gas market is not new: the balancing energy market has had a market maker mechanism that serves to ensure system stability for quite some time. Under this mechanism, storage customers that are selected as market makers (following a tendering procedure) must hold gas in storage for a specified period of time so that it can be used when needed. They must provide evidence to this effect.

The amendment of the Gas Act 2011 now provides in section 87(6) and (7) that such a market maker mechanism can also be introduced in the interest of security of supply. The Federal Minister for Climate Action, Environment, Energy, Mobility, Innovation and Technology decides the required quantities and services, and the use of these quantities as balancing energy. The costs that arise from this measure are covered from the federal budget. Upon the ministry's instruction, the clearing and settlement agent chooses a market maker through a transparent, non-discriminatory, market-based, public tendering procedure.

"This means that gas will be kept in storage and will be available as balancing energy during certain periods of time – for instance, during January and February, when gas consumption is highest," Haber explains another new instrument.

He also underlines that energy suppliers are increasingly feeling the pressure of high gas prices. "However, they can hedge the price risk. This means concluding contracts for selling their gas in storage in advance, e.g. for the upcoming winter, so that they make no losses or at least limit their losses."

Auction results not more than 20% above EU average

During the reporting period, none of the Austrian storage undertakings produced auction results that were more than 20% above the average for comparable services in other selected EU member states (Denmark, Czech Republic, France, Netherlands). Thus, there is no need for E-Control to cost audit the companies.

Storage market functioned well in 2019-2021, report concludes

The Russian invasion of Ukraine in February has shaken up the gas market and has brought the significance of storage into focus. This is another good reason to take an

in-depth look at the storage and flexibility market and competition on this market (legally required every 3 years). "Based on our recent report, we have concluded that the storage and flexibility market worked well during the reporting period," says Haber. "The behaviour of the related undertakings of Gazprom has mainly influenced the wholesale gas market and has impacted the storage market indirectly. We analysed all relevant facts for the period between 1 January 2019 and 31 December 2021, and they show that competition on the Austrian storage and flexibility market is working well. Therefore, we believe that the negotiated access regime for storage facilities continues to be the best option," Haber concludes.

The report itself, alongside an English-language summary, is available at: https://www.E-Control.at/marktteilnehmer/gas/gasmarkt/speicher/wettbewerbsanalyse