UNDERGROUND GAS STORAGE AT THE END OF 2019 IN A NUTSHELL

- At the end 2019, there were 661 UGS facilities in operation in the world. The global working gas capacity reached 422 billion cubic meters (bcm), up 0.9% compared to end 2018. This small increase was driven by Asia-Oceania, Europe and the Commonwealth of Independent States (CIS). The growth in gas storage capacity continued the return to moderate growth observed in 2018 (+1.1%). The global peak deliverability rate amounted to 7,286 million cubic meters per day (mcm/d) at the end of 2019, almost unchanged from end 2018.
- UGS has been developed in five regions: North America, Europe, the CIS, Asia-Oceania, and the Middle East (mostly Iran). North America concentrates two thirds of the sites (441 facilities) and accounts for almost 40% of global working gas capacity (163 bcm) and more than half of global deliverability (3,726 mcm/d). There are 141 facilities in Europe (108.6 bcm, 2,082 mcm/d), 47 in the CIS (121 bcm, 1,242 mcm/d), 28 in Asia-Oceania (22.4 bcm, 200 mcm/d), and 3 in the Middle East (6.9 bcm, 34 mcm/d). There is also one small UGS in Argentina.
- Storage in depleted fields dominates with 80% of global working gas volumes, but storage in salt caverns now accounts for 26% of global deliverability.
- Global working gas capacity has increased significantly since 2010 (+68.5 bcm, or a Compound Annual Growth Rate (CAGR) of +2%). All regions participated in this growth until 2015. However, since 2015, the growth has moderated and even reversed in some regions (Europe). Asia-Oceania and the Middle East are the only two regions where growth in storage capacity is significant, but from a low base.
- At the end of 2019, there were 58 storage projects under construction (new facilities and expansion of existing facilities), adding 41 bcm of working gas capacity. All regions, but Central and South America, participate in the construction activity, but there is a shift of storage investment towards new emerging and growing gas consuming countries. China alone accounts for 41% of the global capacity under construction.
- At the end of 2019, there were 97 identified projects at different stages of planning (81 planned and 16 potential projects). If all built, these projects would add 82 bcm of working gas capacity.
- The review of UGS trends in four key markets (Europe, Ukraine, Russia, and China) highlights the essential role of UGS in rebalancing the market in an oversupplied market. It also highlights the crucial role of UGS on security of gas supply in the context of rising geopolitical risks and trade tensions.