

Contents

Introduction	3
Executive Summary	4
1. Analysis of the current gas crisis: flexibility is crucial	7
1.1 Natural gas prices skyrocket	9
1.2 Several factors converged to make the situation even worse	10
Global economic recovery post-COVID and growth in LNG demand, particularly in Asia	10
Outages at LNG export plants	11
A series of extreme weather events	12
A sluggish recovery in global gas production	14
Lower natural gas stock levels in Europe	17
1.3 Short-term rebalancing	18
1.4 Lessons to be drawn.....	19
2. Current, under construction and planned capacity of underground gas storage in the world	21
2.1 Current capacity of UGS in the world	22
Global working gas capacity essentially unchanged	22
Regional breakdown: North America leads the market.....	22
Top Ten league	23
Historical evolution: a moderate growth in 2020 for the fifth year in a row.....	24
Depleted fields dominate, but UGS in salt caverns is key to deliverability.....	25
2.2 Storage projects.....	28
A growing pipeline of UGS projects: 48 bcm of working gas capacity under construction	28
Identified projects would add 78 bcm, but remain uncertain	30
3. Major trends by region	33
3.1 European lower storage levels contribute to the current gas crisis.....	34
European stock at their lowest level of the last 6 years	34
The devil is in the detail.....	35
3.2 Ukraine, too, has less gas in storage than last year	38
3.3 Russia: replenishing domestic gas stocks, a national priority	39
3.4 United States: Stock levels within the five-year historical range	40
3.5 China is speeding up UGS building	41
Despite recent strong growth, UGS accounts for only 4.5% of natural gas consumption.....	41
Winter 2021/22 preparedness.....	43
Promotion of large-scale UGS clusters.....	43
3.6 Central and South America finally enters the UGS construction league	44
3.7 Middle East: Sharjah has commissioned the second UGS of the UAE.....	45
Annex: Methodology	46
List of Tables, Figures and Boxes	47