



Underground Gas Storage In The World 2010 Edition

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TABLE OF CONTENTS

1. TECHNICO-ECONOMIC CHARACTERISTICS OF GAS STORAGE.....	1
1.1 Technical improvements and research axes in UGS.....	1
1.1.1 Reservoir management and modelling.....	1
1.1.2 Material maintenance and improvements	2
1.1.3 New construction technologies	3
1.2 Economic aspects of underground gas storage.....	3
1.2.1 Storage costs.....	3
1.2.2 Economic value and storage tariffs	9
1.3 Impact of the liberalisation process in Europe.....	12
1.3.1 A more competitive and transparent European UGS business	12
1.3.2 Evolution of storage products and services toward more flexibility.....	13
1.3.3 Development of a secondary market for storage capacity	14
1.4 Storage terminology and definitions.....	15
2. OVERVIEW OF UNDERGROUND GAS STORAGE WORLDWIDE	17
2.1 Historical development of UGS capacity in the world.....	17
2.2 Panorama of UGS facilities in the world.....	19
3. UNDERGROUND GAS STORAGE IN NORTH AMERICA	23
3.1 Legal framework	23
3.1.1 UGS regulation in Canada	23
3.1.2 UGS access regulation in the US	24
3.2 UGS markets development.....	26
3.2.1 Canada.....	26
3.2.2 United States	29
4. UNDERGROUND GAS STORAGE IN EUROPE.....	33
4.1 Legal and regulatory framework.....	33
4.1.1 The liberalisation process in the European Union	33
4.1.2 The Third gas directive	33
4.2 Storage markets in Europe.....	39
4.2.1 Austria	39
4.2.2 Belgium	42
4.2.3 Bulgaria	44
4.2.4 Croatia	45
4.2.5 Czech Republic	46
4.2.6 Denmark.....	49
4.2.7 France.....	51

4.2.8 Germany	54
4.2.9 Hungary	57
4.2.10 Ireland.....	60
4.2.11 Italy.....	60
4.2.12 Latvia.....	63
4.2.13 Netherlands	63
4.2.14 Portugal	65
4.2.15 Poland.....	66
4.2.16 Romania	68
4.2.17 Serbia.....	70
4.2.18 Slovak Republic	71
4.2.19 Spain.....	73
4.2.20 Turkey	75
4.2.21 United Kingdom.....	76
5. UGS IN THE COMMONWEALTH OF INDEPENDENT STATES	83
5.1 Armenia.....	83
5.2 Azerbaijan.....	83
5.3 Belarus.....	84
5.4 Georgia	85
5.5 Kazakhstan	85
5.6 Kyrgyzstan	86
5.7 Russia.....	87
5.8 Ukraine.....	89
5.9 Uzbekistan.....	89
6. UNDERGROUND GAS STORAGE IN THE REST OF THE WORLD	91
6.1 Asia/Oceania	91
6.1.1 UGS in China	91
6.1.2 UGS in Japan.....	92
6.1.3 UGS in Australia	92
6.1.4 UGS in New Zealand	93
6.1.5 UGS in Pakistan	93
6.1.6 UGS in Taiwan.....	93
6.2 The Central and South American market	94
6.2.1 UGS in Argentina.....	94
6.2.2 UGS in Mexico	94
6.3 UGS in the Middle East	95

- 7. THE FUTURE OF UNDERGROUND GAS STORAGE..... 97**
- 7.1 Upcoming trends characterising the development of gas storage..... 97**
 - 7.1.1 Balancing seasonal demand 97
 - 7.1.2 Meeting daily peak demand 97
 - 7.1.3 Strategic stocks and security of supply 98
 - 7.1.4 Other important trends 103
- 7.2 UGS projects and future storage needs in the world by 2020..... 103**
 - 7.2.1 A snapshot of UGS projects in the World..... 103
 - 7.2.2 Focus on European needs for gas storage by 2020 105
 - 7.2.2.1 *Future needs for seasonal storage* 105
 - 7.2.2.2 *Future need for high deliverability underground storages* 109
 - 7.2.2.3 *Strategic gas storage in Europe* 113
- LIST OF FIGURES..... 118
- LIST OF TABLES 119

SUMMARY

The 2010 edition of "*Underground Gas Storage in the World*" provides an update to the previous survey released by CEDIGAZ in 2006. At that time, 610 underground gas storage (UGS) facilities were in operation worldwide, with a working capacity of 319 billion cubic metres (bcm). As of 1 January 2010, this number had reached 642 facilities with a working gas capacity of 333 bcm, or 10.8% of world gas consumption. By 2020, the global UGS demand is expected to grow at a pace of 3.3% per year, and according to the projects identified, more than 760 UGS sites could be active in the world with a total working capacity of approximately 465 bcm.

In this survey, CEDIGAZ analyses the following trends which characterise the rapid development of underground gas storage in the world:

- the strong dynamics of the European storage market, where 127 projects could add 75 bcm of working capacity by 2020,
- the continued development of the UGS market in the United States (49 projects), encouraged by market-based rates allowed by the FERC, and rapid permitting processes,
- the development of facilities in countries with little or no storage capacities at present, in Asia/Oceania, the C.I.S., and Eastern Europe in particular.

This survey provides an analysis of the recent evolutions in the technico-economic aspects of the underground gas storage business, as well as an overview of the UGS markets and their developments in the world, country by country. A specific section is dedicated to the analysis of future UGS needs in Europe by 2020:

- *Technico-economic aspects of UGS*: This part of the survey analyses the latest technical improvements and research axes in the field of underground gas storage. As it is more difficult to build greenfield storage facilities, a lot of work has been done to improve the performance and flexibility of existing storage sites. This section also deals with the evolution of investment and operational costs in storage over the last few years. Furthermore, the CEDIGAZ UGS Survey offers a benchmark of storage tariffs in Europe.

- *Overview and developments of UGS markets worldwide*: the current state of development of the underground gas storage market in the world, country by country, with a list of UGS projects in the world, is presented in this part of the survey. A detailed analysis of the legal framework, Third Party Access (TPA) conditions to storage facilities, and tariffs, is also provided for European countries.

- *The future needs for underground gas storage in Europe by 2020*: In order to assess the future storage capacity needed in Europe, this section analyses different upcoming trends which characterise and drive the dynamic development of UGS: seasonal storage, peak demand storage, strategic storage, and specific needs related to the expansion of natural gas trading and renewable energies.