

Table of Content

- Chapter 1 Research Methodology..... 11**
 - 1.1 Research design..... 11**
 - 1.1.1 Research approach 11
 - 1.1.2 Data collection methods..... 12
 - 1.2 Base estimates and calculations 12**
 - 1.2.1 Market estimates & forecast parameters 12
 - 1.2.2 Key trends for market estimates 14
 - 1.3 Forecast model 15**
 - 1.4 Primary research & validation 16**
 - 1.4.1 Primary sources..... 16
 - 1.4.2 Data mining sources..... 16
 - 1.5 Market Definitions 18**
- Chapter 2 Executive Summary 19**
 - 2.1 Industry synopsis, 2021 - 2032 19**
 - 2.2 Business trends 20**
 - 2.3 Regional trends 22**
 - 2.4 Application trends 25**
- Chapter 3 Industry Insights 28**
 - 3.1 Industry ecosystem analysis..... 28**
 - 3.2 Regulatory landscape..... 30**
 - 3.2.1 North America 31**
 - 3.2.1.1 U.S. 31
 - 3.2.1.1.1 Safety Regulations 34
 - 3.2.1.1.2 Energy policy act, 2005..... 35
 - 3.2.1.2 Canada..... 36
 - 3.2.1.2.1 Hydrogen strategy for Canada..... 36
 - 3.2.1.2.2 Government Initiatives 37
 - 3.2.1.2.3 Clean Fuel Regulations 41
 - 3.2.1.2.4 CAN/BNQ 1784-000 National Standards of Canadian Hydrogen Installation Code 42
 - 3.2.1.3 Mexico 42
 - 3.2.1.3.1 Mexican Official Standard NOM-017-CRE-2019 42
 - 3.2.2 Europe 44**
 - 3.2.2.1 UK..... 45
 - 3.2.2.2 Germany 48
 - 3.2.2.3 Italy..... 49

	3.2.2.4	Netherlands.....	50
	3.2.2.5	Spain	51
	3.2.2.6	France	52
3.2.3	Asia Pacific		53
	3.2.3.1	China.....	53
	3.2.3.2	India	54
	3.2.3.3	Japan	55
	3.2.3.4	Australia.....	55
3.3	Industry impact forces		56
3.3.1	Growth drivers.....		56
	3.3.1.1	Shifting policy framework across the hydrogen industry	56
	3.3.1.2	Growing investments toward hydrogen-based infrastructure.....	57
	3.3.1.3	Increasing clean energy demand	58
3.3.2	Industry pitfalls & challenges.....		59
	3.3.2.1	High capital cost	59
3.4	Growth potential analysis.....		60
3.5	Porter's analysis		61
3.5.1	Bargaining power of supplier		61
3.5.2	Bargaining power of buyers		62
3.5.3	Threat of new entrants.....		62
3.5.4	Threat of substitutes.....		63
3.6	PESTEL analysis		64
Chapter 4	Competitive Landscape, 2023		65
4.1	Introduction		65
4.2	Strategic dashboard.....		65
4.2.1	Air Liquide		65
	4.2.1.1	Investment.....	65
	4.2.1.2	Partnership.....	65
	4.2.1.3	Business expansion	65
	4.2.1.4	Memorandum of Understanding (MoU)	66
	4.2.1.5	Agreement	66
4.2.2	Linde plc		66
	4.2.2.1	Business expansion	66
4.2.3	Air Products and Chemicals, Inc.		67
	4.2.3.1	Contract	67
	4.2.3.2	Business expansion	67
4.2.4	Nel ASA		68
	4.2.4.1	Contract.....	68

4.2.5	SSE	68
	4.2.5.1 Project development.....	68
4.2.6	ENGIE	68
	4.2.6.1 Agreement.....	68
4.2.7	Other Strategies	69
4.3	Innovation and technology landscape	71
4.3.1	Air Products and Chemicals, Inc.	71
4.3.2	Linde plc	71
4.3.3	Other innovations.....	71
Chapter 5	Market, By Application	72
5.1	Key trends	72
5.2	Industrial	72
5.3	Transportation	73
5.4	Stationary	75
Chapter 6	Market, By Region.....	77
6.1	Key trends	77
6.2	North America	77
6.3	Europe	78
6.4	Asia Pacific	80
6.5	Rest of World	81
Chapter 7	Company Profiles	82
7.1	ENGIE.....	82
	7.1.1 Global Overview	82
	7.1.2 Market/Business Overview	82
	7.1.3 Financial Data.....	83
	7.1.4 Product landscape	84
	7.1.5 Strategic Outlook.....	84
	7.1.6 SWOT Analysis	85
7.2	Air Liquide	86
	7.2.1 Global Overview	86
	7.2.2 Market/Business Overview	86
	7.2.3 Financial Data.....	87
	7.2.4 Product Landscape	87
	7.2.5 Strategic Outlook.....	88
	7.2.6 SWOT analysis	88
7.3	Linde plc	89
	7.3.1 Global Overview	89

7.3.2	Market/Business Overview	89
7.3.3	Financial Data.....	90
7.3.4	Product Landscape	91
7.3.5	Strategic Outlook.....	91
7.3.6	SWOT Analysis	91
7.4	FuelCell Energy, Inc.....	92
7.4.1	Global overview	92
7.4.2	Market/business overview	92
7.4.3	Financial data	93
7.4.4	Product landscape	93
7.4.5	SWOT analysis	94
7.5	Air Products and Chemicals Inc.	95
7.5.1	Global Overview	95
7.5.2	Market/Business Overview	95
7.5.3	Financial Data.....	96
7.5.4	Product landscape	97
7.5.5	Strategic Outlook.....	97
7.5.6	SWOT Analysis	97
7.6	McPhy Energy S.A.....	98
7.6.1	Global Overview	98
7.6.2	Market/Business Overview	98
7.6.3	Financial Data.....	99
7.6.4	Product landscape	100
7.6.5	SWOT Analysis	100
7.7	Nel ASA.....	101
7.7.1	Global Overview	101
7.7.2	Market/Business Overview	101
7.7.3	Financial Data.....	102
7.7.4	Product landscape	102
7.7.5	Strategic Outlook.....	103
7.7.6	SWOT Analysis	103
7.8	ITM Power PLC.....	104
7.8.1	Global Overview	104
7.8.2	Market/Business Overview	104
7.8.3	Financial Data.....	105
7.8.4	Product landscape	106
7.8.5	SWOT Analysis	106
7.9	GKN Hydrogen	107

- 7.9.1 Global Overview 107
- 7.9.2 Market/Business Overview 107
- 7.9.3 Financial Data..... 107
- 7.9.4 Product landscape 107
- 7.9.5 Strategic Outlook..... 108
- 7.9.6 SWOT Analysis 108
- 7.10 Gravitricity Ltd 109
 - 7.10.1 Global Overview 109
 - 7.10.2 Market/Business Overview 109
 - 7.10.3 Financial Data..... 109
 - 7.10.4 Product landscape 110
 - 7.10.5 SWOT Analysis111
- 7.11 SSE 112
 - 7.11.1 Global Overview 112
 - 7.11.2 Market/Business Overview 112
 - 7.11.3 Financial Data..... 113
 - 7.11.4 Product landscape 114
 - 7.11.5 Strategic Outlook..... 114
 - 7.11.6 SWOT Analysis 115
- 7.12 Cockerill Jingli Hydrogen 116
 - 7.12.1 Global Overview 116
 - 7.12.2 Market/Business Overview 116
 - 7.12.3 Financial Data..... 117
 - 7.12.4 Product landscape 117
 - 7.12.5 SWOT Analysis 118

Data Tables

TABLE 1	Liquefied hydrogen storage market, 2021 - 2023 (USD Million)	21
TABLE 2	Liquefied hydrogen storage market, 2024 - 2028 (USD Million)	21
TABLE 3	Liquefied hydrogen storage market, 2029 - 2032 (USD Million)	21
TABLE 4	Liquefied hydrogen storage market, by region, 2021 - 2023 (USD Million)	23
TABLE 5	Liquefied hydrogen storage market, by region, 2024 - 2028 (USD Million)	23
TABLE 6	Liquefied hydrogen storage market, by region, 2029 - 2032 (USD Million)	24
TABLE 7	Liquefied hydrogen storage market, by application, 2021 - 2023 (USD Million)	26
TABLE 8	Liquefied hydrogen storage market, by application, 2024 - 2028 (USD Million)	26
TABLE 9	Liquefied hydrogen storage market, by application, 2029 - 2032 (USD Million)	27
TABLE 10	Offices engaged in the DOE hydrogen program: Key activities and focus areas:	32
TABLE 11	Minimum Distance (Feet) from Liquefied Hydrogen Systems to Exposure	34
TABLE 12	Maximum Total Quantity of Liquefied Hydrogen Storage Permitted	34
TABLE 13	Overview of Regulations, Codes, and Standards Related to Hydrogen Infrastructure Safety	35

Charts & Figures

FIG. 1	Forecast approach & model	15
FIG. 2	Industry snapshot	19
FIG. 3	Industry ecosystem	28
FIG. 4	Impact forces	56
FIG. 5	Growth potential analysis	60
FIG. 6	Porter's analysis	61
FIG. 7	PESTEL analysis	64
FIG. 8	Liquefied hydrogen storage market, by application, 2023 & 2032 (USD Million)	72
FIG. 9	Liquefied hydrogen storage market, by region, 2023 & 2032 (USD Million)	77